NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

UNGOVERNED SPACES AND ARMED CIVIL CONFLICTS: THE PREDICAMENT OF DEVELOPING NATIONS

by

David O. Munyua

June 2015

Thesis Advisor: T. Camber Warren
Second Reader: Ian C. Rice

Approved for public release; distribution is unlimited

THIS PAGE INTENTIONALLY LEFT BLANK

REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704–0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE June 2015	3. REPORT TYPE AND DATES COVERED Master's Thesis	
4. TITLE AND SUBTITLE UNGOVERNED SPACES AND ARMED CIVIL CONFLICTS: THE PREDICAMENT OF DEVELOPING NATIONS		**5. FUNDING NUMBERS**	
6. AUTHOR(S) David O. Munyua			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000		**8. PERFORMING ORGANIZATION REPORT NUMBER**	
9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A		**10. SPONSORING/MONITORING AGENCY REPORT NUMBER**	

11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government. IRB Protocol number ____N/A____.

12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited	12b. DISTRIBUTION CODE A

13. ABSTRACT

Several developing nations are grappling with the phenomenon of ungoverned territories, which are believed to be harboring insurgent, terrorist, and other armed violent groups. This study investigates how a developing nation can use its resources to reduce violent activities and, consequently, ungoverned spaces from within its sovereign territory. The study uses geo-referenced violent events data as a measure of violence and spatiotemporal data for law enforcement agencies (LEAs), social services, and economic infrastructure as measures of state authority. All data is specific to Uganda. Using multi-regression models (negative binomial and matched wake analysis), the study employs interpolated spatiotemporal data to estimate the effects of state authority factors on violent events over space and time. The findings show that LEAs, including police, prisons, courts, and border protection, are the most effective in reducing violence and therefore ungoverned territories. Save for schools and local governments, social services like health centers, and economic infrastructure like roads, tend to be associated with increased levels of violence. The policy implication for developing nations is therefore to consider directing their resources toward building their LEAs before or concurrently with socioeconomic services in order to reduce violence emanating from ungoverned spaces.

14. SUBJECT TERMS ungoverned spaces, armed civil conflicts, insurgency, Uganda, state, non-state, counter-state, sociology, geography	**15. NUMBER OF PAGES** 87
	16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT Unclassified	**18. SECURITY CLASSIFICATION OF THIS PAGE** Unclassified	**19. SECURITY CLASSIFICATION OF ABSTRACT** Unclassified	**20. LIMITATION OF ABSTRACT** UU

THIS PAGE INTENTIONALLY LEFT BLANK

**UNGOVERNED SPACES AND ARMED CIVIL CONFLICTS: THE
PREDICAMENT OF DEVELOPING NATIONS**

David O. Munyua
Major, Uganda People's Defense Forces
B.S., Makerere University Kampala, 1997

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN DEFENSE ANALYSIS

from the

**NAVAL POSTGRADUATE SCHOOL
June 2015**

Author: David O. Munyua

Approved by: T. Camber Warren, PhD
                 Thesis Advisor

                 Ian C. Rice, COL, USA
                 Second Reader

                 John Arquilla, PhD
                 Chair, Department of Defense Analysis

THIS PAGE INTENTIONALLY LEFT BLANK

ABSTRACT

Several developing nations are grappling with the phenomenon of ungoverned territories, which are believed to be harboring insurgent, terrorist, and other armed violent groups. This study investigates how a developing nation can use its resources to reduce violent activities and, consequently, ungoverned spaces from within its sovereign territory. The study uses geo-referenced violent events data as a measure of violence and spatiotemporal data for law enforcement agencies (LEAs), social services, and economic infrastructure as measures of state authority. All data is specific to Uganda. Using multi-regression models (negative binomial and matched wake analysis), the study employs interpolated spatiotemporal data to estimate the effects of state authority factors on violent events over space and time. The findings show that LEAs, including police, prisons, courts, and border protection, are the most effective in reducing violence and therefore ungoverned territories. Save for schools and local governments, social services like health centers, and economic infrastructure like roads, tend to be associated with increased levels of violence. The policy implication for developing nations is therefore to consider directing their resources toward building their LEAs before or concurrently with socioeconomic services in order to reduce violence emanating from ungoverned spaces.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

LIST OF FIGURES

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF TABLES

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF ACRONYMS AND ABBREVIATIONS

ADF	Allied Democratic Forces
AU	African Union
CAR	Central African Republic
CTFP	Combating Terrorism Fellowship Program
CSFC	Commander Special Forces Command
DA	Defense Analysis
DRC	Democratic Republic of Congo
GPS	Global Positioning System
HSM	Holy Spirit Movement
JLOS	Justice Law and Order Sector
LRA/M	Lord's Resistance Army/Movement
NRA/M	National Resistance Army/Movement
RSS	Republic of South Sudan
SPLA/M	Sudan People's Liberation Army/Movement
UBOS	Uganda Bureau of Statistics
UN	United Nations
UNLA	Uganda National Liberation Army
UNRA	Uganda National Roads Authority
UNRF	Uganda National Rescue Front
UPDF	Uganda People's Defense Forces
U.S.	United States of America
WNBF	West Nile Bank Front

THIS PAGE INTENTIONALLY LEFT BLANK

ACKNOWLEDGMENTS

My sincere thanks to my beloved wife and children: I know it was not easy staying without me by your sides for one-and-half years. Nevertheless, you graciously supported me and I sincerely appreciate it. I dedicate this work to the loving memory of Michael Abuni Okumu, a father, educator, personal friend, and mentor. Although he never lived to see this work, I am sure his dream has been achieved. To my dear mother, Santina Okumu, I thank you for your unwavering support during my stay at NPS.

This work could not have been completed without the faith, dedication, and constant support provided by my outstanding advisors: T. Camber Warren and Ian C. Rice. I am very grateful to you for accepting and committing to advise me. I learned a great deal from both of you. I want to thank Camber, in particular, for coaching me and working tirelessly to ensure my method of analysis works and is accurate.

I also learned a lot from the faculty of the department of Defense Analysis; I am sincerely thankful to all of them for a job well done. Much thanks goes to the leadership of the department: Dean Gordon McCormick, who made a lasting impression on me from his class Seminar in Guerrilla Warfare; Chairman John Arquilla, whose short brief on the DA website keeps ringing in my mind and will continue to do so; and Program Officer Jennifer Duncan for making it possible for me to undertake the dual master's program.

I thank the Uganda People's Defense Forces leadership through the Commander Special Forces Command for nominating me for the DA program. I am also grateful to the U.S. government through the Combating Terrorism Fellowship Program for sponsoring me for this very important course.

God bless us all.

THIS PAGE INTENTIONALLY LEFT BLANK

I.   INTRODUCTION

Growing up as a young boy in the late 1970s and the 1980s, I bore witness to a number of civil wars both within my country Uganda and our neighbor to the north, the Sudan (that is before the secession of the South in 2011). In 1979, Tanzania invaded Uganda and overthrew the Ugandan dictator Iddi Amin. Shortly after that, in 1980, the Uganda National Liberation Army (UNLA) launched a retribution attack on the people of the West Nile region (northwest of Uganda), in part because Iddi Amin, who tormented them during his reign (1971-1979), originated from that region. My family had to flee to the Sudan. We stayed in exile until 1987 when the south Sudanese insurgent group, Sudan People's Liberation Army (SPLA), intensified the war against the Khartoum government. We had to flee back to Uganda, which was by then relatively peaceful following a successful popular revolution that brought the National Resistance Army (NRA), also previously an insurgent group, to power. The east and central African region has remained in, more or less, the same state of conflict up until the writing of this work.

As I write this work, there is conflict in South Sudan, Sudan (Khartoum), Democratic Republic of Congo (DRC), Central African Republic (CAR), Somalia, and a number of terrorists' activities in Kenya. All the above mentioned countries have been recorded as fragile states in the failed states index.[1] Uganda, Rwanda, and Burundi, had armed conflicts within their borders as well, but managed to push them outside their borders. This region—east and central Africa—also has the highest number of fragile states (developing states) and therefore the highest number of under-governed or ungoverned territories. The nexus between under-governed and/or ungoverned territories and the frequency of conflicts is supported by a large number of research studies, as described in Chapter II. There is also evidence that when a state is bordered by a fragile state, the likelihood of rebellion emerging in that state as well is higher.[2] Rebellion is thus more or less a contagious phenomenon.

---

[1] For the full list, see Fund for Peace Project, "The Fund for Peace," *Fund for Peace*, 2014. Accessed September 30, 2014, http://ffp.statesindex.org/.

[2] Idean Salehyan, *Rebels without Borders: Transnational Insurgencies in World Politics* (Ithaca, N.Y.: Cornell University Press, 2009), 19–126.

It is possible for a fragile state to control or at least mitigate armed conflicts from within its borders, as Uganda and Rwanda have done. This study focuses on how a developing state can use its meager resources to reduce under-governed or ungoverned territories and, in so doing, limit the incidences of armed conflicts within its borders. Insurgent groups (as non-state actors) fight to gain access to state power and authority; so, wherever the opportunity arises, which in this case would be ungoverned territory, they would certainly establish and practice their authority over it.

A.   RESEARCH OBJECTIVE

Fragile states, especially those in the east and central African region, are perturbed by myriad insurgent activities that seem not to have signs of subsiding anytime soon. The international community, more so the United States (U.S.), is equally disturbed by the complexity of the problem. Many measures have been taken to solve the problem of armed conflicts in the region, but it continues to rage on. The U.S. has gone to the extent of sending its own troops to work with the African Union (AU) regional military,[3] and the UN has troops stationed in the region since 1999, but the conflicts still rage on.[4]

This study is intended to contribute to understanding the conflicts in the east and central Africa region through an empirical study. It is my hope that this study provides policy makers with strategic alternatives on how to address the problem of recurrent insurgencies in the region. The emphasis of the leaders of the region is, currently, on using force to fight the insurgents until the point of defeat or surrender. The conflicts, however, rage on. Perhaps, therefore, it is time to sit back and carefully re-examine the conflicts, the approaches used, and come up with a more effective solution to this problem. That is the area this work will focus on.

---

[3] See the full story in Shawn Valosin, "US-Ugandan Forces Complete Joint Training | African Defense," December 22, 2014. Accessed January 23, 2015, http://www.african-defense.com/?p=936&utm_source=December+23+2014+EN&utm_campaign=12%2F23%2F2014&utm_medium=email.

[4] For full discussion, see United Nations, "Current Peacekeeping Operations. United Nations Peacekeeping," *United Nations Peacekeeping Operations*, 2014. Accessed January 17, 2015, http://www.un.org/en/peacekeeping/operations/current.shtml and UNSC, "SECURITY COUNCIL RESOLUTIONS - 1999," *United Nations Security Council Resolutions - 1999*, 1999. Accessed January 17, 2015, http://www.un.org/Docs/scres/1999/sc99.htm.

B.   THE RESEARCH QUESTION

To effectively conduct this research, I used the following question as the guiding framework throughout the thesis writing process: what factors most enhance the ability of developing states to reduce ungoverned territories within their borders?

C.   BENEFITS OF THIS STUDY

This study is expected to show through empirical methods how a developing state can use its meager resources effectively to reduce incidences of armed conflicts. Conflicts emanating from ungoverned territories are most prevalent in developing states; so if the states can leverage their meager resources to reduce ungoverned territories, they will also reduce the prevalence of armed conflicts.

This project brings to the table a new idea on the most effective factors that enhance the ability of a developing state to reduce ungoverned spaces from within its borders. Developing states that are marred by under-governed and ungoverned territories could use their meager resources to limit incidences of armed conflicts within their sovereign territories by penetrating and establishing their authorities in those ungoverned territories and by strengthening their authorities in under-governed territories. Of course this is not a one-day, week, month or year 'silver bullet' solution. It has taken Uganda close to 30 years to pacify the whole country. Uganda's experience is a good learning project; the lessons drawn from this study may therefore reduce the time developing nations may take to pacify ungoverned territories within their borders. This is because resources can be refocused and directed towards achieving the strategic objectives as laid out by the findings of this project.

This study also provides an empirical examination of the conflicts in the east and central African regions. Scholars and political leaders have generally relied on subjective analyses to evaluate the problems in the region. This study will hopefully contribute more systematic empirical evidence to support or refute the currently standing arguments about the conflicts in the region.

D.   THESIS FRAMEWORK

Chapter II reports on the intellectual heritage concerning ungoverned spaces. By implication, it lays the foundation of knowledge on which this project is constructed. It also specifies the exact knowledge gap to fill. Chapter III reports on the theoretical background knowledge on the relationship between the state and non-state actors, and the people over which power and authority are exercised by the two parties (state and counter-state/non-state). Chapter III thus covers the sociology of power and authority, and the dynamic relationship between the state, the non-state actors, and the population in McCormick's "diamond" model. It is intended to give the reader a clear understanding of why the state and the non-state actors have to struggle for power and thereafter establish authority over the population in the territory under their control.

Chapter IV covers the research design used in testing the claims of this project. The first part of this chapter lays out the argument for this study by stating the hypotheses. The data for this project are specific to Uganda, so the second part of Chapter IV gives a brief description of the country with specific focus on the reasons why it was chosen as the primary case for this project. The last part of the chapter describes each of the data variables in detail, including their sources and structuring for analytic purposes. It also describes the methods of analysis used in this study.

Chapter V reports on the results of the regression analyses of the various variables based on the datasets. Each of the results of the analyses is then subjected to evaluation. The implication of each finding is also stated clearly at the end of each analysis.

Chapter VI presents the conclusion drawn from the previous chapters. It states the implications of the findings in summary form. It also reports on recommendations for further research and policy matters for strategic decision makers.

II.   INTELLECTUAL INHERITANCE

A.   WHAT ARE UNGOVERNED SPACES?

There are dissenting views among scholars as to what constitutes ungoverned spaces. Some wonder whether there is such a thing as ungoverned space at all. The term space here refers to territorial land, maritime, outer space, and cyber space. However, for the purpose of this study, I have delineated my definition of ungoverned territories/spaces to mean the land component; although the findings may prove to be applicable to other forms of ungoverned spaces such as cyber and waterways.

Clunan and Trinkunas argued that there is only softened sovereignty in spaces where the state fails to fully exercise its authority. The failure of the state will cause other forms of authority to emerge and fill the gap created by the absence of the state. This other form of governance constitutes the alternative to the state. A space can therefore not be called ungoverned unless we are looking at it from the state-centric point of view. Clunan and Trinkunas went on to argue that it is counterproductive to try to fight the alternative governments. Instead, the international community should collaborate with the alternative governments to fight the other non-state actors who are a threat to global security, especially in the contested or abdicated spaces.[5]

Phil Williams also argued that there are other forms of governance in what we have termed ungoverned spaces. These other forms of governance, sometimes hybrids, are not recognized because we tend to look at governance within the framework of state-centric, top-down control. He predicts a multi-centric form of governance in the future because the non-state centric form of governance is rapidly gaining ground against the state centric mode due to its bottom-up control approach. According to Williams, these

---

[5] Anne L. Clunan and Harold A. Trinkunas, "Conceptualizing Ungoverned Spaces," in *Ungoverned Spaces: Alternatives to State Authority in an Era of Softened Sovereignty*, Chapter 1 (California: Stanford University Press, 2010), 17–33.

two forms of governance are uncomfortably on a collision course in the near future because of people's aspirations for bottom-up control over top-down control.[6]

Whereas it is true that where there is an authority gap, some form of authority will try to fill it, we cannot be absolutely sure of non-state-centric authorities for two reasons. First, they are not recognized as legitimate state authorities by the international community and therefore the level of accountability attributable to them is limited. Second, these so called alternative governments are themselves not substantive; at any time another stronger group can either displace or collaborate with them to cause havoc to the international community. The relationship between al-Qaeda, the Taliban, and the Pashtun tribes in Waziristan is a good example of how terrorists can influence alternative governments to achieve their interests.[7] Therefore, we should instead strive to have a government that can be held accountable by the international community for any threat emanating from its sovereign territory. For the purpose of this project, I will therefore use the term "ungoverned" territory or space only in the state-centric context.

B.   ARE THERE SOLUTIONS FOR UNGOVERNED SPACES?

Rabasa et al., conducted research in seven areas they deemed to be ungoverned territories. In their findings, they identified three types of ungoverned territories: contested, incomplete, and abdicated. Accordingly, they recommended that the U.S. government focuses on strengthening the affected states in making the ungoverned territories unconducive to the terrorists.[8] Haims et al., made a similar argument. They claimed that failed states—states infested with ungoverned territories—can recover if policies and resources aimed at meeting critical challenges can be directed to break the vicious cycles of violence, economic collapse and unfit government. They urged stronger

---

[6] Phil Williams, "Here Be Dragons: Dangerous Spaces and International Security," in *Ungoverned Spaces: Alternatives to State Authority in an Era of Softened Sovereignty*, Chapter 2 (California: Stanford University Press, 2010), 34–54.

[7] Brian Perkins, "Factionalism of the Tehrik-I-Taliban Pakistan: Can the Pakistani Government Correct Past Deficiencies | Small Wars Journal," *Small Wars Journal*, July 19, 2014. Accessed September 17, 2014, http://smallwarsjournal.com/jrnl/art/factionalism-of-the-tehrik-i-taliban-pakistan-can-the-pakistani-government-correct-past-def.

[8] Angel Rabasa et al., *Ungoverned Territories: Understanding and Reducing Terrorism Risks*, Advance Review Copy Edition (Santa Monica, CA: RAND Corporation, 2007), 1–44.

states to align their multilateral and unilateral institutions to breaking the aforementioned cycles.[9] Other authors with similar arguments are William Reno, Ken Menkhaus and Jacob Shapiro, and Ty Groh.[10]

While the arguments of the above mentioned authors are relevant, it is also important to consider precisely where the support resources should be directed. If we knew the sectors of the state that effectively contribute to reduction of ungoverned spaces, then where to deploy the resources would not be a problem. It must be noted that the developing states also have other priority sets that may not necessarily be aligned to reducing ungoverned spaces. Therefore, defense assistances given to them without conditions specifying where to use the aid may end up in sectors that have no or little association with ungoverned spaces.

According to Peter Pham, eliminating insurgents and terrorists from failed states—ungoverned territories—will depend on how the affected state establishes its legitimacy amidst the society it wants to or is supposed to govern—that is, it must be a bottom up approach as opposed to top-down approach. He claims that it is not adequate to rely on the use of force; in fact according to him this is more often than not counterproductive.[11] Yet, there are times when force does work.

While I agree with Peter Pham that the use of force is not adequate, I also think it is important for the state to use force, initially, to establish itself in ungoverned territories. This is because one cannot establish legitimacy in the midst of chaos. The state has to use force to subdue the opposing forces before it can transit, gradually, into establishing a

---

[9] Marla C. Haims et al., *Breaking the Failed-State Cycle* (Santa Monica, CA: RAND Corporation, 2008), 1–44.

[10] William Reno, "Persistent Insurgencies and Warlords: Who Is Nasty, Who Is Nice, and Why?," in *Ungoverned Spaces: Alternatives to State Authority in an Era of Softened Sovereignty*, Chapter 3 (California: Stanford University Press, 2010), 57–76; Ken Menkhaus and Jacob N. Shapiro, "Non-State Actors and Failed States: Lessons from Al-Qaida's Experience in the Horn of Africa," in *Ungoverned Spaces: Alternatives to State Authority in an Era of Softened Sovereignty*, Chapter 4 (California: Stanford University Press, 2010), 77–94; and Ty L. Groh, "A Fortress without Walls: Alternative Governance Structures on the Afghan-Pakistan Frontier," in *Ungoverned Spaces: Alternatives to State Authority in an Era of Softened Sovereignty*, Chapter 5 (California: Stanford University Press, 2010), 95–112.

[11] Peter J. Pham, "State Collapse, Insurgency, and Counterinsurgency: Lessons from Somalia," *The U.S. Army War College Strategic Studies Institute*, November 14, 2013. Accessed January 17, 2015, http://www.strategicstudiesinstitute.army.mil/pubs/display.cfm?pubID=1176.

coherent bottom up control over its sovereign territory. It is very difficult to build legitimate governance where there is constant interference from the non-state actors who are less responsible to the population in the first place. My argument, therefore, supports the use force where it is necessary to create the required environment for the establishment of legitimacy.

Idean Salehyan argues that civil wars must be considered not in isolation but in the context of the region and internationally. He claims that inter and intra state conflicts are driven by transnational linkages with non-state actors bridging the internal and external divide. He made three strong assertions: first, weak neighbors make countries prone to civil war; second, transnational rebels create and reflect conflicts between states; third, that resolving transnational rebellion requires international cooperation.[12]

While I agree with these basic points, it is also important to remember that the country affected cannot rely on international cooperation without exerting its own effort to weed out the insurgents from within its borders. Moreover, some neighbors use insurgents as proxies to fight their neighbors. In such a case, waiting for the neighbor to cooperate will not work. For instance, the Lord's Resistance Army (LRA), a Ugandan insurgent group used to operate from Sudan. The Sudanese government used them as proxies to fight the Ugandan government. This was because Uganda was also supporting the SPLA, a Sudanese insurgent group.[13] In this scenario, both Uganda and Sudan could not have cooperated to get rid of the insurgent groups from within their respective borders. Each country was busy fighting its insurgent group, and the insurgents also clashed with each other on condition of "my friend's enemy is my enemy."[14]

Ashraf Ghani and Clare Lockhart argue that global stability lies in the creation of a global middle class of citizens who can see paths of upward social and economic mobility and that they should have trust in the national or international institutions. They further assert that hope emerges when the individual state is determined and able to

---

[12] Salehyan, *Rebels without Borders, 19–126*.

[13] Christopher Day, "The Fates of Rebels: Insurgencies in Uganda," *City University of New York* 43, no. 4 (July 2011): 439–58.

[14] Ibid.

provide the full range of the functions of a modern state. The more able the state is, the less the need to rely on the use of force.[15] This is another argument in support of the bottom-up approach to ending global armed conflicts where the individual states rely on their own resources to strengthen their economies and the welfare of their citizens.

Under the right circumstances, globalization creates effective states that are prosperous and secure, as opposed to poor and unstable states. The Ghani and Lockhart argument appears sound because the prosperity of a state can enable it to weed out elements of under-governed territories. This is because a rich state is able to provide services and establish viable institutions to its citizens in all of its territories. These institutions will represent the presence of the state amidst the population and leave no gap for an alternative authority to fill. It may, however, not be possible for all states in the world to be prosperous enough to support their citizens' requirements satisfactorily. The solution could be taking deliberate efforts to direct its meager resources towards factors that contribute effectively towards reducing ungoverned spaces and, by so doing, also reduce the prevalence of armed conflicts.

C.   IS IT POSSIBLE TO HAVE GOVERNED SPACES THROUGHOUT THE WORLD?

James C. Scott argues that some societies just do not like to be governed by a central authority like the state. They consider the state as oppressive machinery and therefore they prefer to keep away from it by retreating to rugged terrain where the state apparatus is reluctant to reach. As incentives, they get away without paying taxes, rule of law, and other state demands that are obligatory to the citizens of the country. The argument of Scott, therefore, is that we can never have a situation where there are no ungoverned territories; this is because a state will always generate communities that are resistant to its rule.[16]

---

[15] Ashraf Ghani and Clare Lockhart, *Fixing Failed States: A Framework for Rebuilding a Fractured World*, 1 edition (Oxford; New York: Oxford University Press, 2009), 17–198.

[16] James C. Scott, *The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia* (New Haven: Yale University Press, 2010), 1–238.

Scott argues in favor of those individuals unwilling to live in what we call civilized nation-states. Although we all, idealistically, wish the world were peaceful and free, in reality the world is full of uncertainty. In a situation where one has friends and enemies, one must remain alert and act to ensure one's own survival. It should also be noted that not all state avoiding societies are peaceful. For instance, the Karamojong tribe in northeastern Uganda raid livestock as part of their cultural practice. They have advanced to the level of using AK47 assault rifles as weapons for raiding livestock.[17] They therefore posed a security threat to their neighbors who are unarmed and law abiding citizens. The government of Uganda had to intervene to protect the tribes neighboring the Karamojong and also take the further action of disarming the Karamojong. Therefore, much as some communities may be opposed to state rule, the state has a responsibility to tame them, especially when they are a source of insecurity to other communities.[18]

D.   CONCLUSION

The general argument in the literature on ungoverned spaces is that the absence of the state in a given territory will inevitably result in an alternative authority emerging to fill the sovereignty/authority gap—"power vacuum" will always be filled. The alternative authority may be a threat to peace and security globally or not necessarily a threat but simply filling the gap created by a missing state authority. In other words, ungoverned territories are areas of uncertainty in terms of security threats. There is, therefore, no consensus about how best the state can establish authority in such territories. Some authors even think state interference in ungoverned territories will complicate matters instead of solving them. Therefore, there is a need to find a model that can provide insights into the mechanisms of control of ungoverned territories.

---

[17] See the full story in Ben Jones, "Katine: Who Are the Karamojong," *The Guardian*, February 16, 2009. Accessed September 18, 2014, http://www.theguardian.com/katine/2009/feb/17/karamojong-background.

[18] Kennedy Mkutu, "Disarmament in Karamoja, Northern Uganda: Is This a Solution for Localized Violent Inter and Intra-Communal Conflict," *The Round Table* 97 (2008): 99–120, doi:10.1080/00358530701844718.

E.   THE KNOWLEDGE GAP AND REMEDY

While most of the research discussed here focused on what constitutes ungoverned space or territory, and how the ungoverned spaces end up being occupied by non-state authorities, most of the solutions proposed by the authors focused on strengthening the states where the ungoverned territories exist specifically through donations from stronger states. In other words, stronger states are urged to give aid to support weaker or fragile states to fight insecurities emerging from ungoverned territories within the confines of their national boundaries.

None of the literature reviewed, however, explicitly states how the ungoverned territories could be limited or reduced. There is no empirical measurement of either quantitative or qualitative nature that suggests the most commendable method of how a fragile state can effectively reduce ungoverned territories from within the confines of its national boundary, and, in so doing, get rid of insurgent activities or armed conflicts from within its sovereign territory. That is a knowledge gap that this study seeks to bridge.

How can a fragile state effectively resolve the problem of armed conflicts emanating from ungoverned or under-governed territories from within its sovereign territory? Should fragile states rely on stronger states to resolve the problem of civil conflicts within their borders? Without empirical evidence, it is very difficult to show how a fragile state can resolve conflicts emanating from ungoverned territories within the confines of its borders. Instead, one must observe and record data from a country that has actually gone through the process.

For the purpose of this project, I chose to use Uganda as a single case study. This is because Uganda has gone through the process of reducing under-governed and ungoverned territories from within its borders and in so doing reduced the incidences of armed conflicts in its sovereign territory. Uganda has been marred by myriad insurgent groups emerging and vanishing. There are also those insurgent groups that have persisted to date like the Lord's Resistance Army (LRA), and the Allied Democratic Forces (ADF). What is different, however, is that none of these insurgent groups now operates

from within Uganda. The problem of ethnic violence perpetrated by the Karamojong cattle rustlers in the northeast of Uganda has also been substantially reduced.

I therefore used Uganda as a case study to test and find out the most effective method of how a developing state can use its meager resources to reduce under-governed or ungoverned spaces and in so doing limit incidences of armed civil conflict from within its sovereign territory.

III. THEORY OF THE RELATIONSHIP BETWEEN THE STATE, THE NON-STATE, AND THE POPULACE

This chapter explains how the divide between the state and the non-state arises and plays out by examining the theories behind the concepts of power, authority, the state, and the non-state, and the dynamic relationship between the state, the non-state, and the populace. Since the state is endowed with resources that surpasses that of the non-state, it thus has more capability to fight and dominate its sovereign territory. It is also true that not all states are capable, however, of controlling all their sovereign territory. The parts of the state's sovereign territory that it is unable to govern may become contested, abdicated, or totally occupied by non-state actors. Although the non-state actor is relatively weak, in terms of fighting power, it has more informational advantages and thus can chose when and how to engage in battle with the state, especially in contested territories.

There are two sections to Chapter III. The first, Section A, concerns the sociology of power, authority, and civil war; this gives the reader the theoretical background about how scholars view these concepts. This topic answers the questions about deviance, collective action, and civil war in a society. The second, Section B, deals with the dynamic relationship between the state, the counter-state/non-state actors, and the population after the onset of civil conflict; it also touches on the role of external supporters in influencing this dynamic relationship.

A. SOCIOLOGY OF POWER, AUTHORITY, AND CIVIL WAR

Why do some people effectively control the behavior of others? Why do people even go farther to legitimize control by some people over their behavior? What causes some people to be opposed to the control of their behavior by others, and even go farther to resist passively and or actively? The central factor here is political power; political power, or just power as defined by Anthony Giddens and his co-authors, which is similar to how Shaun Best defines it, is the ability of individuals or groups to make their own interests or concerns count, even when others resist it. It sometimes involves the use of

force to coerce to elicit the desired response. But power is also normally accompanied by a belief system that gives it credibility and justification. Government authority or just authority is a particular form of power that is considered to be rightfully exercised through a legitimate process. People who are subject to such authority voluntarily consent to it. It should be noted that such authority is not limited to a democracy; but dictatorships, monarchies, and religion-based governments can also have legitimate power over their populations.[19]

The term state refers to a political apparatus (government institutions and civil service officials) that is exercising authority over a designated territory and is supported by internationally recognized legal regimes. States reserve the right to use force within their sovereign territory to coerce their citizens to comply with the laws of the country. The state has a responsibility to the people of the country (social contract); it must provide security, social and welfare services, and also engage the people in reinforcing its own legitimacy by calling on the people to participate in elections and also pay taxes to the state establishment.[20]

The counter-state is the opposite of the state. It is normally composed of an opposing force to the authority of the state. The non-state actor, the larger category under which the counter-state falls, is not legally recognized by the international community. Where the non-state actor exists, however, it tends to establish authority in territories under its control. The counter-state, in particular, may first emerge as a small opposition social movement group to the state; it may then grow, depending on the response of the state, to become an armed rebellion—resulting into a civil war (armed civil conflict).

Authorities, that is to say both the state and the counter-state, leave some 'openings' through which the ruled people can respond to the influence of their authority over them (the people); a kind of feedback channel. This phenomenon which is called **'dialectic of control'** allows for some freedom of action for the ruled to also shape how

---

[19] Anthony Giddens et al., *Introduction to Sociology*, Eighth Edition (New York: W. W. Norton & Company, 2011), 402--453 and Shaun Best, *Introduction to Politics and Society*, First Edition (London ; Thousand Oaks, California: SAGE Publications Ltd, 2002), 6–40.

[20] Giddens et al., *Introduction to Sociology,* 409–434.

he is ruled.[21] The moment that crucial 'opening' of shaping one's own rule is closed or threatened with closure, people tend to withdraw their loyalty and turn to disobedience. The general argument that is widely accepted in sociology is that what makes people protest against the state is **relative deprivation**; a theory coined by James Davies, which suggests that people become rebellious when there is a very wide discrepancy between people's actual life needs and what they thought could be achieved. This argument is clearly depicted in Figure 1.
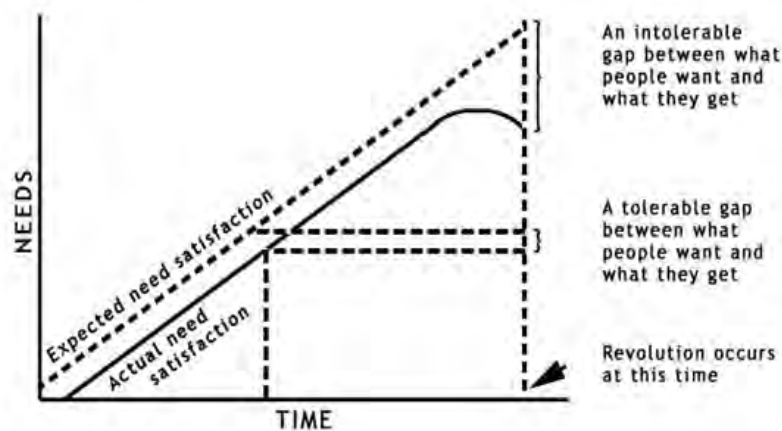
Figure 1.   James Davies's J-Curve.[22]

According to Davies, there is a fine gap between what people expect and what they actually get to be satisfied (see Figure 1.). The gap is tolerable to a certain threshold. The moment the actual needs satisfaction deviates 'greatly' from the expected needs satisfaction, the people become intolerable and this will mark the onset of a revolutionary campaign. This is denoted by the huge gap between what people want and what they

---

[21] Anthony Giddens, *The Consequences of Modernity*, First Edition (Stanford, Calif.: Stanford University Press, 1991); Anthony Giddens, *The Constitution of Society: Outline of the Theory of Structuration*, New Edition (Berkeley: University of California Press, 1986); and Best, *Introduction to Politics and Society,* 145–209.

[22] From Tor G. Jakobsen, "The J-Curve – James C. Davies' Theory of Revolutions," *Popular Social Science*, April 17, 2013. Accessed October 5, 2014, http://www.popularsocialscience.com/2013/04/17/james-c-davies-j-curve-theory-of-revolutions/.

actually get. There is no standard metric for the degree of the threshold; it varies from one community to another. The baseline, however, is that there must be a decline in the socioeconomic needs and physical deprivation of the people, which creates a sense of being at the brim of losing what they have earned. Davies asserts that the likelihood of a revolution following socioeconomic and physical deprivation is higher in richer communities because they have something to lose. Poor communities, on the other hand, have greater tolerance level because they have little to lose. When the degree of deprivation threatens their lives that is when they will rise and cause a revolution.[23]

Charles Tilly built on Davies's theory by stating how and why collective action actually occurs. That is an explanation of why 'the people' organize jointly to protest against the state given the conditions of relative deprivation they are experiencing individually. Tilly analyzed the processes of revolutionary change in the context of protests and violence; and he distinguished four components of collective action: the first is the availability of an organization that rallies the group or groups of people together; the second is the ability of the organization to mobilize various resources to support the organization's activities; the third is a sense of common interest in the people mobilized; they must see the same cause in their respective policies' gains and losses; and the last one is the availability of the opportunity, a chance event, that provides the means to deliver a revolutionary agenda.[24]

Tilly went on to assert that when the state lacks full control over the territory it is supposed to administer legally, a condition called **multiple sovereignty** emerges—shared sovereignty between the state and the non-state actor. 'Multiple-sovereignty' is a fertile ground for revolutionary movements to occur and it may result into regime change.[25] Theda Skocpol, in explaining the conflicts in Eastern Europe after the Cold war,

---

[23] For detailed discussions, see Ibid; James Davies, *The Importance of Suffering: The Value and Meaning of Emotional Discontent,* 1 edition (London ; New York: Routledge, 2011); James Davies and Dimitrina Spencer, eds., *Emotions in the Field: The Psychology and Anthropology of Fieldwork Experience* (Stanford, California: Stanford University Press, 2010), 155–171; and Ted Robert Gurr, *Why Men Rebel,* (Princeton, New Jersey: Princeton University Press, 1970), 58.

[24] Charles Tilly, *From Mobilization to Revolution,* (Reading, Mass: Addison-Wesley, 1978), 2–1–7-50; and Mancur Olson, *The Logic of Collective Action: Public Goods and the Theory of Groups,* Revised Edition, (Cambridge, Mass: Harvard University Press, 1971), 5–60.

[25] Ibid.

contrasted Tilly's argument by asserting that revolutionary movements emerge as unintended consequences of more partial aims. According to Skocpol, the political conflicts are shaped by existing social, economic, and international conditions; and they proceeded in different ways depending on how each social revolution emerged in the first place.[26]

Also contrary to Davies's assertion, James Fearon and David Laitin through empirical study found little evidence in support of the argument that any society that has the strongest 'grievances' will automatically resort to violence. Some societies are more oppressed than others but continue to remain peaceful. This is because such communities, through 'rational' calculation, do not see the viability of violence as a means of causing a revolution. This could also be because the state has a powerful policing capability, such that any violent resistance will be crushed at its infancy. Fearon and Laitin showed that the onset of insurgency—resistance against the state—is caused by certain favorable conditions; these conditions are mainly weakness of the state's economy and policing capacity, prevalent political instability, rough terrain, and large population.[27] Therefore, Davies's argument is only a component, one of several other factors, of the 'favorable conditions' that are required for an insurgency to emerge.

The key point being, at least for the purpose of this work, that revolutionary movement emerges as a challenge to the state's authority. The degree of the challenge may escalate from street demonstrations to full-blown armed rebellion against the state establishment, and may eventually result in a revolution overthrowing the state.

B.   THE DIAMOND MODEL

At the onset of civil conflict, the state's authority over its sovereign territory comes under a challenge. The relationship between the state and the people becomes unstable because a third party has emerged to compete with the state for the support and loyalty of the people. The competition between the state and the counter-state also affects

[26] Theda Skocpol, *States and Social Revolutions: A Comparative Analysis of France, Russia and China* (Cambridge; New York: Cambridge University Press, 1979), 3–47.

[27] James D. Fearon and David D. Laitin, "Ethnicity, Insurgency, and Civil War," *American Political Science Review* 97, no. 01 (February 2003): 75–90, doi:10.1017/S0003055403000534.

the way the population will respond to the two parties, depending on how they are treated by the competing parties. Although the state has the international recognition as the legitimate authority or the 'ruler' in the country, the counter-state will also establish a parallel authority in areas within the same country where the state's authority is absent or limited—ungoverned or under-governed territories.

According to Gordon McCormick there are four parties that play important roles in the dynamic relationship of a civil conflict. These parties are: first, the state; second, the counter-state; third, the population; and the last one is the international (external) community. The state and the counter-state are the lead competitors. The population and the international community, often times, are divided in supporting either the state or the counter-state. With the prevailing conflict situation, although the state is legally the authority in the conflict country, that authority is rendered unstable by the counter-state by establishing a parallel authority in the same country.[28]

---

[28] Gordon H. McCormick, "Seminar in Guerrilla Warfare" (Lectures, Naval Postgraduate School, Monterey, CA, Winter 2014); Greg Wilson, "The Mystic Diamond: Applying the Diamond Model of Counterinsurgency in the Philippines," in *Gangs and Guerrillas*, ed. Michael Freeman and Hy Rothstein, 4 (Monterey, CA: NPS, 2011), 15–21; and Gordon H. McCormick and Frank Giordano, "Things Come Together: Symbolic Violence and Guerrilla Mobilization," *Third World Quarterly* 28, no. 2 (2007): 295–320, doi:10.1080/01436590601153705.

People

COG

Enhance government
legitimacy and control

Insurgent
infrastructure

Focus on people and
their needs, security

Leg 1

Leg 2

Internal Environment

Government

Leg 3

Insurgents
(Extremists/
Terrorists)

External Environment

Diplomatic efforts
to secure external
support/cooperation
and punish bad actors

Leg 4

Leg 5

External support and
financing to insurgents

International Actors
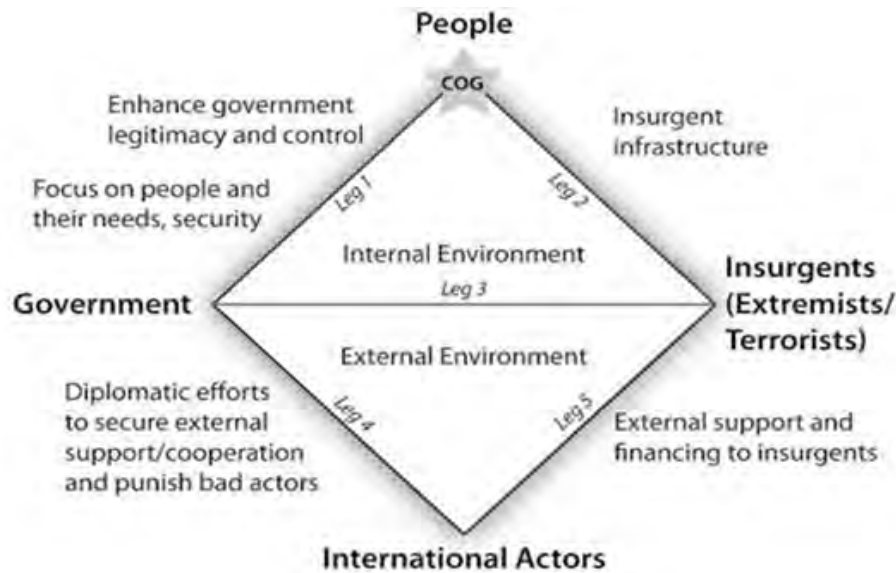
Gordon McCormick's Diamond Model

Figure 2.   Gordon McCormick's Diamond Model.[29]

As depicted in Figure 2, within the internal environment, the state (government) and the counter-state (insurgents) are in conflict with each other. Neither side can completely win the war without the support of the people. The people thus form the center of gravity (COG) in this 'game.' The state, on one hand, is in charge of the greater part of the country, it therefore has access to state resources such as the military, the police, the national treasury, and the communications infrastructure.[30] As such, it has the force advantage. It can deploy an overwhelming power to subdue the insurgents, but only if it has information about where exactly the counter-state is located. The counter-state, on the other hand, has the information advantage. It knows exactly where the state forces are located and closely watches the activities of the state. In other words, it maintains the freedom of action. It attacks the state elements at a location and time of its choosing. The state therefore strives to get information about the location of the counter-state while the

---

[29] From Wilson, "The Mystic Diamond: Applying the Diamond Model of Counterinsurgency in the Philippines."

[30] Camber T. Warren, "Not by the Sword Alone: Soft Power, Mass Media, and the Production of State Sovereignty," *Camber Warren, Department of Defense Analysis, Naval Postgraduate School*, 2011, http://www.camberwarren.net/papers.html.

counter-state strives to build its own fighting capability to be able to fight the state effectively.[31]

According to McCormick, the strategies of the competing parties—the state and the counter-state—are driven by the quest to overcome their respective weaknesses. The state will fight to overcome its problem of information disadvantage while the insurgent will fight to build its strength so as to overcome its force disadvantage. The state will therefore strengthen leg 1 of the diamond (see Figure 2), the connection between the state and the population, by trying to win the support of the population. This may include providing security and social services to the population with the expectation of winning their support and also accessing intelligence about the counter-state (this argument is supported by studies conducted by Eli Berman and his co-authors[32] and Cullen S. Hendrix[33]). By providing social services and security to the people, the state is reinforcing its legitimacy. The state also strives to isolate the counter-state from the population by conducting operations that curtail the effectiveness of leg 2 of the diamond (see Figure 2) that is, the link between the counter-state and the population. The intelligence the state gets from the population through leg 1 facilitates its action against the counter-state through leg 3, which is the direct link between the state and the counter-state, on the diamond. The counter-state uses leg 2 to build its manpower and get other resource supplies to keep the insurgent organization operational. It will also try to isolate the state from the population by severing the relationship between the state and the population through leg 1. At a time of its choice, the counter-state uses leg 3 to attack the state and in the process weakens the state's strength and capabilities.[34]

---

[31] For further discussions see McCormick, "Seminar in Guerrilla Warfare"; Wilson, "The Mystic Diamond: Applying the Diamond Model of Counterinsurgency in the Philippines"; McCormick and Giordano, "Things Come Together"; Cullen S Hendrix, "Measuring State Capacity: Theoretical and Empirical Implications for the Study of Civil Conflict," *Journal of Peace Research* 47, no. 3 (May 1, 2010): 273–85; and Eli Berman, Jacob N. Shapiro, and Joseph H. Felter, "Can Hearts and Minds Be Bought? The Economics of Counterinsurgency in Iraq," *Journal of Political Economy* 119, no. 4 (August 2011): 766–819.

[32] See details in Berman, Shapiro, and Felter, "Can Hearts and Minds Be Bought?"

[33] Details are available in Hendrix, "Measuring State Capacity."

[34] See full explanations in McCormick, "Seminar in Guerrilla Warfare"; McCormick and Giordano, "Things Come Together"; and Wilson, "The Mystic Diamond: Applying the Diamond Model of Counterinsurgency in the Philippines."

There is always an external component to a civil conflict.[35] The state has diplomatic leverage with the international community as the recognized authority in the country. It therefore uses this link to secure international support for its operations against the counter-state elements through leg 4 of the diamond. The state also uses the international recognition advantage to curtail external support to the counter-state through leg 5, the channel that links the counter-state to the international players. While the counter-state uses its link to the international community through leg 5 to mobilize resources and also seek legitimacy to its cause by making credible narratives against the state. This may result in the international community urging the state to negotiate peaceful settlement of the conflict with the counter-state. In this case, the international community is playing a mediation role. The counter-state thus seeks to discredit the state by severing its ties to the international community through leg 4.[36]

The contest between the state and the counter-state will eventually result in a winner. According to McCormick, there are three types of wins: weak, strong, and complete wins. A weak win is where the prevailing party has pushed the opponent to its 'breaking' point but has failed to establish its authority over the previously contested territory. In other words, the 'winner' has temporarily curtailed the ability or the means of the adversary to organize against it. But there is likelihood of re-emerging given time. Strong win means the 'winner' has prevailed over the adversary by 'breaking' its ability (means) to organize, and has also gone ahead to establish its authority over the previously contested territory. In other words, the winner has eliminated the opportunity for the adversary to mobilize and wage war against it. The adversary has been defeated but not his will to fight. Given another opportunity, the defeated party may reorganize in the

---

[35] *Rebels without Borders*; Salehyan, "Transnational Insurgencies and the Escalation of Regional Conflict: Lessons for Iraq and Afghanistan"; and Nicolas Berman and Mathieu Couttenier, *External Shocks, Internal Shots: The Geography of Civil Conflicts*, SSRN Scholarly Paper (Rochester, NY: Social Science Research Network, March 1, 2014). Accessed November 23, 2014, http://papers.ssrn.com/abstract=2444917.

[36] For further discussions, see Salehyan, *Rebels without Borders*; Salehyan, "Transnational Insurgencies and the Escalation of Regional Conflict: Lessons for Iraq and Afghanistan"; McCormick, "Seminar in Guerrilla Warfare"; McCormick and Giordano, "Things Come Together"; Wilson, "The Mystic Diamond: Applying the Diamond Model of Counterinsurgency in the Philippines"; Berman and Couttenier, *External Shocks, Internal Shots*; Berman, Shapiro, and Felter, "Can Hearts and Minds Be Bought?"; and Hendrix, "Measuring State Capacity."

future to fight again; that is, the motivation to wage war still persists. A complete win is where the prevailing party has won and the defeated party has conceded defeat and given up the will to engage again in war. The winner thus establishes authority in the previously contested territory and the defeated party accepts the winner as the legitimate authority over the territory. In other words, the motivation to wage war against the winner is no longer there.[37]

The state provides security and social services to the population, and it also engages the population to participate in activities, such as elections, to reinforce its legitimacy. Some states, however, are weak and therefore unable to establish control over all its sovereign territory. This results into under-governed or in extreme cases ungoverned territories in the country. Non-state actors that are necessarily opposed to the state will take advantage of the state's weakness to establish a parallel authority in the ungoverned territories. One would therefore assert that when the state is able to govern all its sovereign territory, it will be able to limit the instances of armed civil conflicts within its sovereign territory.

---

[37] Gordon H. McCormick, "The Complete Win," in *Gangs and Guerrillas*, ed. Michael Freeman and Hy Rothstein, Chapter 1 (Monterey, CA: NPS, 2011), 3–7.

IV.   RESEARCH DESIGN

The overall theory proposed by this work is that when a developing state limits under-governed or ungoverned territories within its sovereign territory, it will, by extension, also limit the prevalence of armed civil conflicts. This is based on the assumption that insurgents and other non-state actors, the groups that perpetrate armed civil conflicts, tend to establish parallel authority where the state's authority is missing that is to say in under-governed or ungoverned territories. The method available to the state for limiting under-governed or ungoverned territories is to establish its authority in those territories; meaning that, it must use its presence to penetrate those territories in order to displace the non-state actor.

A.   THE HYPOTHESES

How can a developing country reduce incidences of armed conflicts emanating from ungoverned spaces within its borders? The first argument in this study is that as the state authority is introduced in an ungoverned territory, the alternative authority, that is the non-state or counter-state authority, is displaced or forced to dissolve. As per international law, the state is recognized as the legal authority in its sovereign territory. However, as it is the case in most developing nations, the state normally lacks the resources to control all its legal territory. As a result, the counter-state takes advantage of the state's weakness to establish a parallel authority to that of the state in such territories; in essence, they are countering the state's authority. In this work I argue that the state, much as it may be a developing one, can use its meager resources to reclaim its rightful position as the authority in the ungoverned spaces within its sovereign territory. Therefore, the first hypothesis of this work is stated as:

H1   Introducing the state's authority in ungoverned territories will reduce incidences of armed civil conflicts emanating from ungoverned spaces from within the sovereign territory of the state.

The model in Figure 3 shows an ideal-typical dynamic armed civil conflict relationship between the state and the counter-state authorities. It shows how a previously

ungoverned space transitions from being ungoverned, to contested, and eventually to governed space.
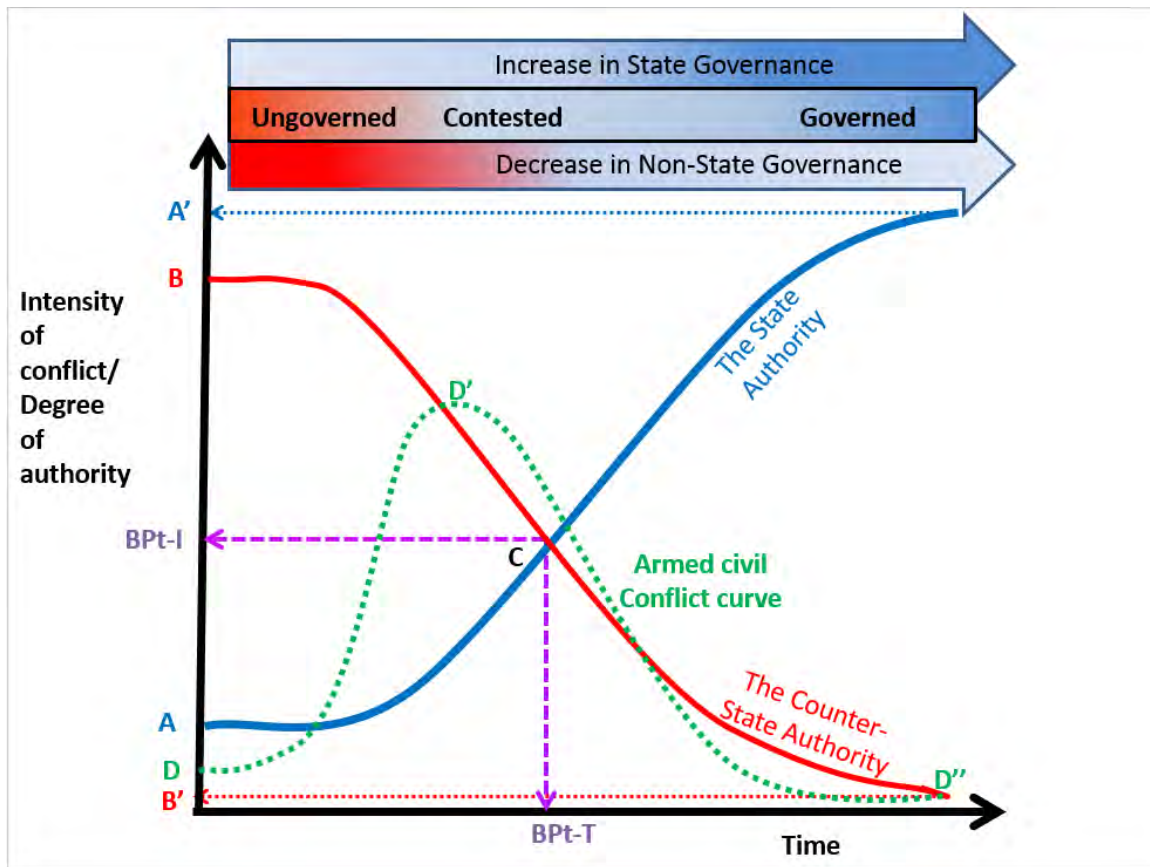
Figure 3.   Model of Pacifying Ungoverned Spaces.

In Figure 3, the blue curve ACA' represents the state's authority; the red curve BCB' represents the counter-state's authority; the point C is the breaking point, where you see the breaking point intensity (BPt-I) at the breaking point time (BPt-T); and the green curve DD'D'' represents the conflict intensity. The bars above the graph show how the ungoverned space transitions from being ungoverned to governed.

In ungoverned territory, the counter-state establishes its authority and it is fully in charge to the degree at point B. However, because the state is the recognized authority over its sovereign territory (where the counter-state carved out a portion for its control), it reserves some degree of legal authority over the same territory as denoted by degree A, in

24

other words, the state's authority is not absolutely absent (zero). When the state embarks on liberating such under-governed territory, the territory turns into a contested one. What follows thereafter will depend on who is gaining ground and who is losing. This is normally sorted out through military means. As the usually stronger force, the state gradually takes charge of the territory passing through a phase of breaking point (BPt-I, BPt-T) where the state's authority is equally counter-balanced by the decreasing counter-state's authority, which is at point C. As the state continues to gain ground, its authority over the territory increases in degree from A to C and upwards to A'; while that of the counter-state decreases from B to C and downwards to B'.

It must be emphasized that, the early stages of the conflict that is D to D'; as represented by A to C (the state's authority curve) and B to C (the counter-state's authority curve) normally involves the use of force. However, the later stages that is D' to D'' on the conflict curve, especially after C are more subtle methods where the state is establishing its authority by introducing law enforcement agencies, social services, economic infrastructure, and activities such as elections to further strengthen its legitimacy. There will always be opposition to whatever action the state may choose to undertake. That is why the intensity of conflict can never go to zero value. The climax D' of the intensity of conflict is normally manifested just before the breaking point (BPt-T, BPt-I). This is because the intensity of armed conflict is usually highest just before the counter-state starts to retreat. It is at this stage of conflict that the belligerents would each consider deploying its maximum capability to, hopefully, turn the trend of events in their favor; the result of which is increased conduct of violent activities. The moment the counter-state begins to withdraw its authority, and, the state, using its force advantage, starts to impose its authority; the change of hand in authority becomes evident. The events that follow are the activities that concretize the state's authority.

In situations where the conflict does not go the state's way, the curves may be different than the ones shown here. The counter-state's authority may keep above the BPt-I and that of the state below the BPt-I; in other words it may be very difficult for the state to achieve breaking point. The territory may therefore either remain contested or under-governed (that is, limited state authority based on the virtue of the state being

recognized internationally). In some cases, the state may decide to relegate the territory to the counter-state that is abdication; for example the Pakistani government versus the Taliban in Waziristan.[38]

It must be noted that armed civil conflict is a broader phenomenon than just the act of violence. Throughout the conflict processes that is from D through D' to D'', several types of violence will be manifested. There is a complex interaction between the state, the non-state (counter-state), and the population in terms of who commits violence against whom, and who denounces who especially during the early phases of the conflict (D to D'). The support of the population tends to shift to the winning side. As for the population, at the climax of the conflict (D'), it is more of strive for survival than support for a particular side. This is the point where the population is in the 'corridor' of decision making (sitting on the fence) and therefore their support to either side is at the lowest degree.[39]

In this study, the second problem is to determine the most effective state authority factor that most enhances the state's ability to penetrate ungoverned spaces within its sovereign territory in order to limit the prevalence of armed civil conflicts emanating from such spaces. The concept of state penetration is another way of representing a gradual process of establishing state authority in the ungoverned territories. The process encompasses a number of factors that contribute individually with varying degrees of support to the state's authority. This is depicted in the model in Figure 4.

---

[38] For detailed discussion, see Brian Perkins, "Factionalism of the Tehrik-I-Taliban Pakistan: Can the Pakistani Government Correct Past Deficiencies | Small Wars Journal," *Small Wars Journal*, July 19, 2014. Accessed February 2, 2015, http://smallwarsjournal.com/jrnl/art/factionalism-of-the-tehrik-i-taliban-pakistan-can-the-pakistani-government-correct-past-def; Phil Williams, "Here Be Dragons: Dangerous Spaces and International Security," in *Ungoverned Spaces: Alternatives to State Authority in an Era of Softened Sovereignty*, Chapter 2 (California: Stanford University Press, 2010), 34–54; and Anne Marie Baylouny, "Authority Outside the State: Non-State Actors and New Institutions in the Middle East," in *Ungoverned Spaces: Alternatives to State Authority in an Era of Softened Sovereignty*, Chapter 7 (California: Stanford University Press, 2010), 136–52.

[39] Stathis N. Kalyvas, *The Logic of Violence in Civil War*, 1 edition (Cambridge; New York: Cambridge University Press, 2006), 146–210.
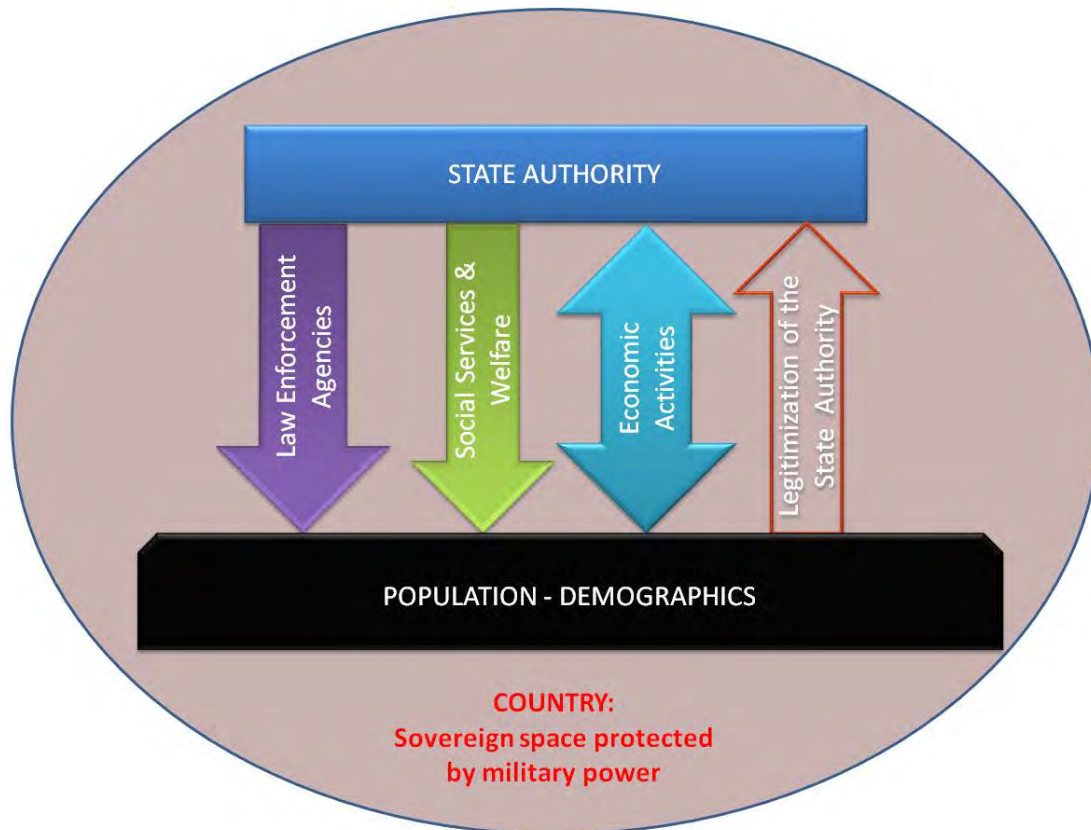
Figure 4.   Model of the State Verses the Population—Social Contract.

The term authority is almost incommensurable; the best way to measure it is therefore to use indirect methods such as using its various component factors that we can represent quantitatively. Recall the earlier discussion in this work defines authority as the legitimate use of power over a group of people in a given geographical unit.[40] The factors that, in turn, constitute state authority are law enforcement, social services and welfare, economic infrastructure, and general conduct of polity. Further, the state's authority is bounded within the geographically defined territory and its inhabitants.

Each of the state authority component factors has elements within it that can be quantitatively measured and therefore taken as representative of the component. Specifically, law enforcement, for the purpose of this work, consists of the elements of

---

[40] Anthony Giddens et al., *Introduction to Sociology*, 8th edition (New York: W. W. Norton & Company, 2011), 402–453; Shaun Best, *Introduction to Politics and Society*, First Edition (London ; Thousand Oaks, California: SAGE Publications Ltd, 2002), 1–40.

police forces, courts, prisons, and border posts (that is immigration police); social services and welfare consists of health facilities, local governments, and schools, economic activities, among others, are represented by road networks; and as the physical scaffolding, all the above state authority component factors are linked to and supported by geographic variables such as elevation, distance to the state capital and demographic measure of population density.[41] Legitimization of the state varies from state to state. There are democratic, authoritarian, and monarchy regimes; meaning that the form of the legitimization cannot be uniform across all states.

The question then is, which of those component factors that comprise the state's authority is the most effective in enhancing the capability of a developing nation's efforts to reduce ungoverned spaces? My hypothesis is that the law enforcement agency (LEA) is the most effective in asserting the presence of the state. This is because in any state, the LEA is the custodian of implementing the enforcement of law and order. This activity involves ensuring the citizens do abide by the laws of the country. This alone makes the LEA a powerful component of the state authority. Within the LEA, I hypothesize that the police forces are the most effective in reducing the prevalence of violence and therefore ungoverned spaces. The second hypothesis, therefore, has two subsets; H2a and H2b as follows:

H2a   Law enforcement agencies are the most effective factor in enhancing the capacity of the state to reduce ungoverned spaces, as well as the incidences of civil conflicts within its sovereign territory.

H2b   Police forces are the most effective law enforcement element in reducing violence and ungoverned spaces.

To test these hypotheses, I used data specific to Uganda.

---

[41] For full discussions, see Best, *Introduction to Politics and Society*; Giddens et al., *Introduction to Sociology*; Anthony Giddens, *The Consequences of Modernity*, First Edition (Stanford, Calif.: Stanford University Press, 1991), parts I & II; and Anthony Giddens, *The Constitution of Society: Outline of the Theory of Structuration*, New Edition (Berkeley: University of California Press, 1986), 1–34, 162–373.

B.   WHY UGANDA FOR THIS STUDY?

There are three major reasons why Uganda is used as the source of data for this work. First, Uganda has undergone through the cycle of civil wars and post-conflict reconstruction; it has had ungoverned spaces under the authority of insurgents and later regained control of these territories. The civil wars between the government and the ADF and LRA were mostly fought from within the borders of Uganda. The insurgents used Ugandan territory as their operational base in the initial stages of the conflict. However, at the later stages of the conflicts, the insurgents had to relocate to territories outside the borders of Uganda; although they kept making incursions to conduct operations and flee back to their sanctuaries in the neighboring countries.[42] As of 2015, insurgent groups no longer carry out operations in Uganda and therefore the state has successfully reduced the ungoverned spaces that were originally used by the insurgents as sanctuaries. In so doing, Uganda has also limited the prevalence of armed conflicts in the country.[43]

Second, Uganda is located in the center of the most conflict-prone region of Africa—east and central Africa. The physical, social, economic, and political conditions that prevail in Uganda are generally similar to those in the neighboring countries. It therefore means that what Uganda was able to implement as strategies for reducing the prevalence of armed conflicts could be applicable in the neighboring countries.

---

[42] For full discussions on ungoverned spaces, see Anne L. Clunan and Harold A. Trinkunas, "Conceptualizing Ungoverned Spaces," in *Ungoverned Spaces: Alternatives to State Authority in an Era of Softened Sovereignty*, Chapter 1 (California: Stanford University Press, 2010), 17–33; Peter J. Pham, "State Collapse, Insurgency, and Counterinsurgency: Lessons from Somalia," *The U.S. Army War College Strategic Studies Institute*, November 14, 2013. Accessed March 2, 2015, http://www.strategicstudiesinstitute.army.mil/pubs/display.cfm?pubID=1176; Perkins, "Factionalism of the Tehrik-I-Taliban Pakistan: Can the Pakistani Government Correct Past Deficiencies | Small Wars Journal"; Ken Menkhaus and Jacob N. Shapiro, "Non-State Actors and Failed States: Lessons from Al-Qaida's Experience in in the Horn of Africa," in *Ungoverned Spaces: Alternatives to State Authority in an Era of Softened Sovereignty*, Chapter 4 (California: Stanford University Press, 2010), 77–94; and Ty L. Groh, "A Fortress without Walls: Alternative Governance Structures on the Afghan-Pakistan Frontier," in *Ungoverned Spaces: Alternatives to State Authority in an Era of Softened Sovereignty*, Chapter 5 (California: Stanford University Press, 2010), 95–112.

[43] See detailed data indicating reduction in violence at Clionadh Raleigh, Andrew Linke, and Caitriona Dowd, "Armed Conflict Location and Event Data (ACLED)," Data Bank, *Armed Conflict Location and Event Data Project*, (2015).Accessed September, 17, 2014, http://www.acleddata.com/ and Ralph Sundberg, Mathilda Lindgren, and Ausra Padskocimaite, "Georeferenced Event Datasets," *UCDP GED Global Instances of Political Violence*, November 15, 2012. Accessed January 15, 2015, http://www.ucdp.uu.se/ged/data.php.

Therefore, Uganda serves as a pilot project whose experiences could be applied in solving similar problems found in its neighbors.[44]

Third, Uganda has data on most aspects of its social, political, economic, and physical geography. Unlike some of its neighbors that do not have such records that are key aspects of state authority and development. Uganda has data on law enforcement institutions, selected social service institutions, and economic infrastructure. Additionally, there is also data compiled by international organizations on insurgent and other violent activities that occurred within Uganda, which measures the degree of conflict within the state.[45]

C.   DESCRIPTION OF THE VARIABLES

1.   Dependent Variable

The dependent variable in this study is the insurgents' and other non-state actors' incidences of what I have collectively called violent events or activities. I have used UCDP's GED database (v.1.5-2011) as the dependent variable for this study. The GED data consists of 24,381 events in total and 1,655 data points attributed to Uganda. Each event refers to the incidence of the use of armed force by an organized actor against another organized actor, or against civilians, resulting in at least 1 direct death, estimated at a specific location and for a specific temporal duration.[46]

Each of the violent events is recorded with codes indicating the approximate spatial grid reference, the administrative location name, the actors involved, the date and time of the event, the resultant fatalities, notes or remarks by the authors, and the source

---

[44] See the most current events map at Raleigh, Linke, and Dowd, "Armed Conflict Location and Event Data (ACLED)."

[45] For the full data, see Government of Uganda JLOS, "GIS Map Locations of JLOS Institutions," *Justice Law and Order Sector*, December 4, 2013. Accessed September 17, 2014, http://www.jlos.go.ug/old/index.php/2012-09-25-11-09-41/2013-02-11-08-51-36/gis; and Government of Uganda UBOS, "Uganda Bureau of Statistics | Uganda's Official Statistics Provider," National Data Bank, *Uganda Bureau of Statistics*, (2015). Accessed September 17, 2014, http://www.ubos.org/.

[46] See the detailed data description in Sundberg, Lindgren, and Padskocimaite, "Georeferenced Event Datasets."

of the information. The GED covers conflicts in Africa from 1989 to 2010.[47] It therefore gives this project a wider range of years than is available in other data sets. Prominent among the activities in the GED data are those for the LRA, the ADF, WNBF, and Karamojong cattle raiders.

The violent events represent the non-state actor's actions; that is it is asserting itself in the territories in which the activities have been recorded. The bottom line is that a state of civil conflict in which the state's authority is challenged and the state is forced to respond to assert itself has occurred. As the state asserts its authority (through the independent variables), these non-state activities (violent events) are expected to be correspondingly displaced; that is the prevalence of violence is expected to be reduced in the sovereign territory of the state.

2.   Independent Variables

The independent variables fall under the following three broad categories that represent different dimensions of the authority of the state; first, is law enforcement, second, social services and welfare, and third, economic infrastructure. Next, I describe each category of independent variables.

a.   *Law Enforcement*

Law enforcement is a key factor in the measurement of state authority. The state uses its law enforcement apparatus to enforce its will and therefore authority over the inhabitants of the territory under its control. This is, of course, based on the laws that govern the territory. In this study, the variables that I used for measuring law enforcement include data on **Police Stations, Border Posts, Courts,** and **Prisons**. The data is from Uganda's Justice, Law, and Order Sector (JLOS) website. The data for each of these four agencies consists of location codes facility name, administrative location, number of staff, equipment to facilitate staff's work, geographical locations (GPS coordinates) to good degree of precision since the data was collected manually at each facility location. Additionally, the date and time the facility was constructed, date and time the data was

---

[47] Kristine Eck, "In Data We Trust? A Comparison of UCDP GED and ACLED Conflict Events Datasets," *Cooperation and Conflict* 47, no. 1 (2012): 124–41.

recorded, source of the information, and the contact information for the facility is also included. This data covers all of Uganda geographically during the 1922 to 2013 time frame.[48] This is the only data available, open source, on Uganda's justice, and law and order sector. It meets the criteria for spatial and temporal requirements and it covers the duration window (1990–2010) for the thesis.

To test H1 (hypothesis one), which asserts that the introduction of state authority in a given location causes the non-state authority to relocate or dissolve, the law enforcement facilities introduced in a particular location, is therefore expected to cause the violent events to reduce or disappear altogether. For the purpose of this study, I extracted part of the data from 1990 to 2010.

b. *Social Services and Welfare*

Another component factor of state authority is the state's ability to provide social services and attend to the welfare requirements of the citizens under its control. This factor, as assumed, is cardinal in influencing the population under the control of the state to accept and submit to living under the state's authority. In this study, the elements I have considered under this category for analysis are **health facilities, local government headquarters,** and **schools**. There is data on Uganda's health facilities, schools, and local government headquarters from Uganda Bureau of Statistics (UBOS) website.[49] This data has a shorter time frame in years ranging between 2000 and 2010. Therefore, the estimates for changes in violent actions will only be available for the 2000 to 2010 period.

Each of the elements under the social services and welfare category is used by the state as a channel for providing services to the population under its control. To test H1, each element, is independently estimated; if H1 is true, then we expect the introduction of these services to the population to cause the non-state authority to dissolve or be displaced; that is the level of violence is expected to decrease with the establishment of

---

[48] For full data description, see JLOS, "GIS Map Locations of JLOS Institutions."

[49] Find the details of the data in UBOS, "Uganda Bureau of Statistics | Uganda's Official Statistics Provider."

the facilities. Introduction of a health facility in a location gives free access to medical services; introducing a school provides free access to education for the children in the local area; a local government administration provides first of all employment opportunity to the locals but it also brings administrative services closure to the population.[50] For instance, one does not have to travel to the next district to process personal documents such as identity cards, birth certificates, employment and retirement processes and so on.

c. *Economic Infrastructure*

Economics and commerce are also factors used in determining a state's authority. The state as the authority in a sovereign territory has the powers of regulating economic activities and commerce within the domains of its control. However, parts of the sovereign territory that the state is under-governing or failed to govern will have a different—non-state—regulatory authority. Under economic activities, I considered data on roads network, which is available at Uganda National Road Authority (UNRA)[51] website. The UNRA data are image data (shapefiles) showing the network of trunk roads in Uganda. For the shapefile analysis, the distance from the violent events to the road polygon is calculated and the resultant data is used as the independent variable to be estimated against the dependent variable. The argument here is that as the roads are constructed in the territories, the presence of the state is further asserted. The people's allegiance will, as such, firmly lean towards the state at the disadvantage of the non-state actors. Road networks enhance the economic productivity of the people. In Uganda, road usage is free apart from taxes levied through taxing fuel and charges on licenses.

To test H1, the interpolated roads data is estimated against the dependent variable. If H1 is true, then we expect to see the introduction of roads in a given location to cause the violent events to dissolve or relocate.

---

[50] For full description, see World Bank, "A Snapshot of Uganda's Health and Education Services," *World BanK News*, November 19, 2013. Accessed January 13, 2015, http://www.worldbank.org/en/news/opinion/2013/11/19/a-snapshot-of-uganda-s-health-and-education-services.

[51] For full description of the data, see Government of Uganda UNRA, "Uganda National Roads Authority (UNRA). Efficient Roads for National Development," *Uganda National Roads Authority*, 2014. Accessed January 29, 2015, https://www.unra.go.ug/.

3.   Control Variables

There are other variables that may influence the dependent variables other than the ones considered above as independent variables. Since the second hypothesis (H2a and H2b) of this study is to establish the most effective factor that enhances the state's ability to reduce ungoverned spaces, it is prudent to estimate other variables' effect on the dependent variable as well. The factors I have considered under this category are mean of population totals per unit kilometer square and distance from the state capital (Kampala). There is available data on Uganda's population totals for 2005. Uganda's last population census was in 2014 but the data is not yet uploaded at the website.[52] Distance to the state capital is calculated based on coordinates of Kampala. The purpose of controlling for population and distance to Kampala is to ensure uniformity of conditions of estimating the effects on the dependent variable by the various independent variables.

Testing for H2a and H2b will be done at the end of the analysis. This is because in this test, the purpose is to find out whether it is true that the LEA is the most effective factor in enhancing the capability of the state in ungoverned territories. That means evaluating the combined estimates of the elements of LEA should show more significant effects and impact on the dependent variable than the combined element-level effects of the other factors. If the LEA is determined to be more effective, then a drilldown analysis will further be carried out to determine the most effective element of the LEA factor in reducing ungoverned spaces and violent events.

D.   DATA SUMMARY

In Table 1 I summarize the data used in this project by file type, range of data and the sources of each dataset. The file types indicated are those used in the final analysis. Meaning that, the original data may be in other forms but with the aid of analytical software they are transformable into forms suitable for the analysis process without affecting its integrity. Some of the data do not have start date, more especially polygon files because it is not applicable.

---

[52] See the full data in UBOS, "Uganda Bureau of Statistics | Uganda's Official Statistics Provider."

Table 1.   Summary of the Data Used in This Study.

Variable	File Type	Start date	End Date	Source
Violent Events	Vector	1989	2010	UCDP GED
Police Facilities	Vector	1922	2012	JLOS Uganda
Court Facilities	Vector	1935	2012	JLOS Uganda
Prison Facilities	Vector	1930	2012	JLOS Uganda
Border Posts	Vector	1926	2012	JLOS Uganda
Health Facilities	Vector	2005	2009	UBOS Uganda
Local Government	Vector	2006	2012	UBOS Uganda
School structures	Vector	2002	2009	UBOS Uganda
Road Network	Shape/Polygon	----	2014	UNRA Uganda
Population	Raster	2001	2001	UBOS Uganda
Elevation	Raster	----	1996	USGS USA

E.   THE METHODS

1. The Investigation Method

In order to analyze the relationship between the dependent and the independent variables, the geospatial data for Uganda is divided into grid resolutions of 10 kilometers, 30 kilometers (baseline), and 50 kilometers instead of using the politically influenced district, county, or sub-county boundaries to interpolate the dependent and independent variables. Then, counts of the dependent variable in each grid resolution are estimated against each of the independent variables' interpolated counts or distances data in the corresponding grids. This enables the observation of the effect of the state authority elements, individually, on the non-state violent events.

The data used in this study are counts of events with no negative integers and are widely dispersed; it is therefore prudent to use negative binomial regression model to analyze the variables. Since the negative binomial regression model tends to be non-effective with smaller number of data points, I avoided this problem by ensuring each model consisted of a minimum of 90 data points. This specification effectively tests the first hypothesis (H1).

For the purpose of H2a, each state authority component factors (that is the combined elements) are used as independent variables against the dependent variable, and then the resultant levels of confidence of significance and the substantive significance of each is used to determine the most effective of the factors.

2. Drilldown Method

To account for some of the serious limitations of the negative binomial regression model, I also use the matched wake analysis (MWA) method to explore further the most effective factor in influencing the reduction of violence and ungoverned spaces in addition to the methods used above. With this statistical method, the counts for previous and posterior events are determined for spatial and temporal offsets from independent and control variables' events. Then the result is estimated in a difference-in-differences regression design. That is, sliding spatiotemporal windows are used to aggregate the violent event counts before and after each 'intervention' (i.e., the construction of a police station) and these real intervention locations are then statistically matched with randomized control points spread evenly across the country. Causal effects are then estimated by determining whether the pre-post differences in violence around the real events are systematically larger than the pre-post differences around the random control points, similar to the comparison of a 'treatment' with a 'placebo'. This method reduces two known empirical problems in establishing casual relationships in event data analysis; the modifiable areal unit problem (MAUP) and selection bias that confront analysts of event data. Additional benefit of this method is that it allows the analyst to consider effects across multiple scales of time and space. Furthermore, by controlling for the effects of prior levels of violence, this method also rules out the possibility of reverse causation that might otherwise have been used to challenge the findings of this work.[53]

---

[53] For full description of this method, see Sebastian Schutte and Karsten Donnay, "Matched Wake Analysis: Finding Causal Relationships in Spatiotemporal Event Data," SSRN Scholarly Paper (Rochester, NY: Social Science Research Network, April 14, 2014). Accessed May 25, 2015, http://papers.ssrn.com/abstract=2425119.

V.   RESEARCH FINDINGS

The findings generally support the hypothesis that a developing nation can reduce incidences of armed civil conflicts emanating from ungoverned spaces from within its sovereign territory by introducing the state's authority in those ungoverned or under-governed territories. The independent variables show different levels of strength of association with the violent events at varying grid resolutions from the epicenter of the activities. Using different grid resolutions ranging from 10 kilometers, 30 kilometers, to 50 kilometers, each independent variable shows different statistical significance levels at these three different resolutions. When I tested the 100-kilometer grid resolution it yielded only 30 data points, which is inadequate for credible regression analysis with the negative binomial model; therefore the results for this grid resolution have been omitted.

The findings are presented in Tables 2, 3, and 4; the data analyzed include those for the individual elements within law enforcement, social services, economic infrastructure, and the alternate or control variables. I also analyzed the data for the combined versions of the elements for law enforcement agencies and the social services to test for the most effective state authority component factor that the state can use to reduce violent events.

A.   RESULTS

To ensure robustness of the analysis, I used two count-data-based regression models: the negative binomial regression and the quasi-Poisson regression. The analysis also used both count and distance functions to interpolate the data for the regression models. I also calculated the normally distributed covariates (logged variables) and estimated them against the dependent variable to further verify and ensure the reliability of the results. Additionally, I also carried out the same analysis using the ACLED[54] data and the results show a similar trend. These robustness measures at each of the three grid resolutions (10 kilometer, 30 kilometer, and 50 kilometer) enabled comparison of the

---

[54] For details of data, see Raleigh Clionadh, "Realtime Data (2014) | ACLED," World Bank Sponsored Data Project, *Armed Conflict Locations & Event Data Project*, (November 29, 2014). Accessed October 23, 2014, http://www.acleddata.com/data/realtime-data-2014/.

results so as to be sure of the reliability of the findings. Overall, the findings are in general agreement with the UCDP dataset though I did not include these findings in the results table. The regression results in Tables 2, 3, and 4 refer to those of the negative binomial models using the UCDP GED[55] data for the dependent variable with the individual variables (Model 1), combined independent variables (Model 2), and the combined state authority elements as the independent variables (Model 3). Each model is estimated at the three grid resolutions mentioned earlier.

Baseline grid resolution model specification: I have chosen 30 kilometers as the baseline model grid resolution. This is based entirely on my personal experience living and working in Uganda. During the 1990s, I estimate there was approximately one police station or a health facility in a district serving the populace with an average radius of up to 50 kilometers. This radius of access to police or health services reduced to an average of between 10 kilometers and 30 kilometers in the 2000s. Therefore, the 30-kilometer resolution, as peak distance, is a reasonable estimate.

---

[55] For details of the data, see Sundberg, Lindgren, and Padskocimaite, "Georeferenced Event Datasets."

Table 2.   Negative Binomial Regression Model 1 Results.

Model 1 (Violent Events against Individual Independent Variables)			
Grid Resolution	**(10 Km)**	**(30 Km)**	**(50 Km)**
Police Stations	0.041	0.073**	-0.019
	(0.094)	(0.029)	(0.016)
Border Posts	-0.637	-0.721**	-0.767***
	(0.769)	(0.332)	(0.270)
Courts	0.690**	0.252	0.357**
	(0.302)	(0.153)	(0.146)
Prisons	-0.121	0.031	-0.072
	(0.365)	(0.136)	(0.120)
Health Centers	0.177***	0.109***	0.056***
	(0.060)	(0.023)	(0.017)
Local Government	0.068**	-0.014	-0.003
	(0.031)	(0.010)	(0.007)
Schools	-0.019**	-0.009***	-0.003**
	(0.009)	(0.002)	(0.001)
Distance to Roads	-0.033***	-0.032***	-0.037***
	(0.005)	(0.006)	(0.007)
Population Mean	0.0005	-0.001	-0.002
	(0.001)	(0.002)	(0.002)
Distance to Kampala	0.019***	0.019***	0.018***
	(0.002)	(0.002)	(0.002)
Constant	-4.688***	-2.919***	-0.820
	(0.405)	(0.548)	(0.691)
Observations	1,796	230	94
AIC	2,224.929	956.743	570.040

Coefficients and standard errors (in Parenthesis) derived from regression analysis of the law, justice, and socioeconomic services while controlling for population and distance to the state capital—Kampala. Note: *$p < 0.1$ **$p<0.05$ ***$p<0.01$

Table 3.   Negative Binomial Regression Model 2 Results.

Model 2 (Violent Events against Combined independent Variables			
Grid Resolution	**(10 Km)**	**(30 Km)**	**(50 Km)**
Police + Border	0.042	0.039	-0.010
(Law & Order)	(0.085)	(0.028)	(0.016)
Courts + Prisons	0.030	0.117	0.063
(Justice)	(0.169)	(0.080)	(0.075)
Health + School + Local Government	0.004	0.001	0.001
(Social Services)	(0.007)	(0.002)	(0.001)
Population Mean	0.0005	-0.002	-0.006***
	(0.001)	(0.002)	(0.002)
Distance to Kampala	0.021***	0.020***	0.017***
	(0.002)	(0.002)	(0.002)
Distance to Roads	-0.035***	-0.038***	-0.042***
	(0.005)	(0.006)	(0.007)
Constant	-5.099***	-2.948***	-0.359
	(0.397)	(0.537)	(0.683)
Observations	1,796	230	94
AIC	2,226.028	970.325	578.038

Coefficients and standard errors (in Parenthesis) derived from regression analysis of the combined law, justice, and socioeconomic services while controlling for population and distance to the state capital—Kampala. Note: $^{+}p < 0.1$ $^{**}p<0.05$ $^{***}p<0.01$

Table 4.   Negative Binomial Regression Model 3 Results.

Model 3 (Violent Events against State Authority Components)			
Grid Resolution	**(10 Km)**	**(30 Km)**	**(50 Km)**
Law Enforcement Agencies	0.034	0.054**	0.0001
(Law and Justice departments.)	(0.065)	(0.026)	(0.016)
Social Services	0.005	0.001	0.001
(Health + School +local Government)	(0.007)	(0.002)	(0.001)
Population Mean	0.0005	-0.002	-0.006***
	(0.001)	(0.002)	(0.002)
Distance to Kampala	0.021***	0.020***	0.017***
	(0.002)	(0.002)	(0.002)
Distance to Roads	-0.035***	-0.038***	-0.043***
	(0.005)	(0.006)	(0.007)
Constant	-5.129***	-3.001***	-0.344
	(0.397)	(0.537)	(0.660)
Observations	1,796	230	94
AIC	2,224.509	968.927	576.542

Coefficients and standard errors (in Parenthesis) derived from regression analysis of the state authority components while controlling for population, distances to state capital—Kampala, and roads. Note: $^{+}$*p < 0.1* ***p<0.05* ****p<0.01*

41

3.   Law Enforcement

There are four variables considered under law enforcement: police forces, border posts, courts, and prisons. The police forces variable results (Table 2) show that introducing a police facility in a given area has positive and significant effects on violent events. The result is significant at the baseline regression model of 30-kilometer grid resolution ($p<0.05$). However, at the 10-kilometer and 50-kilometer grid resolutions, the results are not significant. The meaning of this finding is that more violent events are associated with more police facilities at the baseline grid resolution. In short, violent events increase with more police facilities at a resolution of 30 kilometers. One conclusion that can be drawn from this finding is that when a police facility is introduced in a given area more violent events are recorded at the stations. The negative coefficient at the 50-kilometer grid resolution, though not significant at conventional confidence level, suggests the possibility that police stations would also reduce violence. It could also mean the stations are built where violence is rampant.

The results for border posts (Table 2) points in the opposite direction to that of the police forces; the establishment of border posts (immigration police) in a given area has negative and significant effects on the prevalence of violent events. This result is significant at the 30-kilometer and the 50-kilometer grid resolutions ($p<0.05$ and $p<0.01$, respectively). This finding suggests that border posts tend to reduce incidences of violence at resolutions of 30-kilometers and larger. One conclusion could be that, as more of the facilities are established, the level of violence is correspondingly reduced arguably because armed groups tend to avoid border posts—a deterrent effect.

The police forces and the border control forces are basically the same forces; both are intended for policing service. Some differences between them are based on the location and type of role they each play. With regards to reducing ungoverned spaces and violent events, the two can be considered one. I have a variable that combines police and border forces, labeled as Police + Border Posts (Law & Order)—Table 3. The results for estimating the combined police forces against the violent events variable show positive but non-significant effects at the 10-kilometer and 30-kilometer grid resolutions. Violent events increase with more of the combined police forces facilities. One could conclude

that this is supporting evidence towards the combined police forces being associated with prevalence of violent events. But at this point, we cannot assertively say whether the police forces follow the violence or the other way round. One could conclude that the police forces registered violent events as they try to enforce law and order wherever they are located. Note also that at the 50-kilometer grid resolution the sign changes to negative; meaning that the effect of the combined police forces on violence may change from increasing to reducing it.

The results for courts (Table 2) show positive and significant effects; the number of courts has an effect of increasing with the prevalence of violent activities. This finding is significant at grid resolutions of 10 kilometers and 50 kilometers ($p<0.05$). In other words, the more court facilities, the more the number of violent events is recorded. In conclusion, the finding with regard to courts suggests that courts are positively associated with increased violent activities. This could be because courts are located in towns where violence is more prevalent.

The results for the prisons variable (Table 2) are bidirectional and not significant; suggesting the possibility of increasing violence as well as reducing it. At this stage we cannot draw any conclusion with regards to the effect of prisons on violence. The courts and the prisons normally work hand in hand to administer justice and punishment to the populace. It is reasonable to bind them together as the state's justice and or internal affairs department. The combined data shows positive and non-significant estimates against violent events (Table 3). As more courts and prisons are introduced, the level of violent events increases.

To get an overall effect of LEAs, I combined all the variables considered under LEA, including police forces, border posts, courts, and prisons. The results, as shown in Table 4, for this combined LEA data show positive and significant ($p<0.05$) estimates against the violent events, as illustrated in Figure 5 and Figure 6. The positive coefficients may be suggesting that at the close proximity of LEAs, there could be some associated recordings of increased violent events. In Figures 5 and 6, we see violent events increase directly with increase in LEAs; the frequency of violence is highest with higher values of LEAs (see the heat graph in Figure 6).
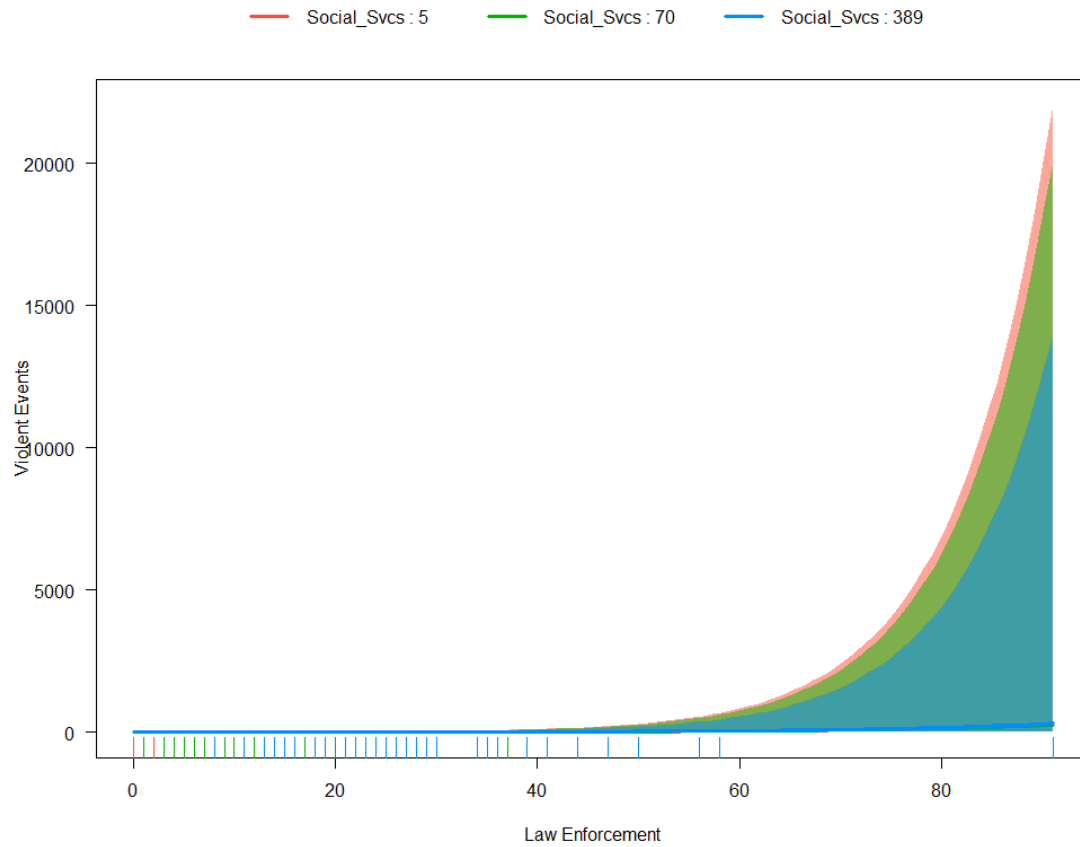
Figure 5.   The Effects of LEAs and Social Services on Violent Events
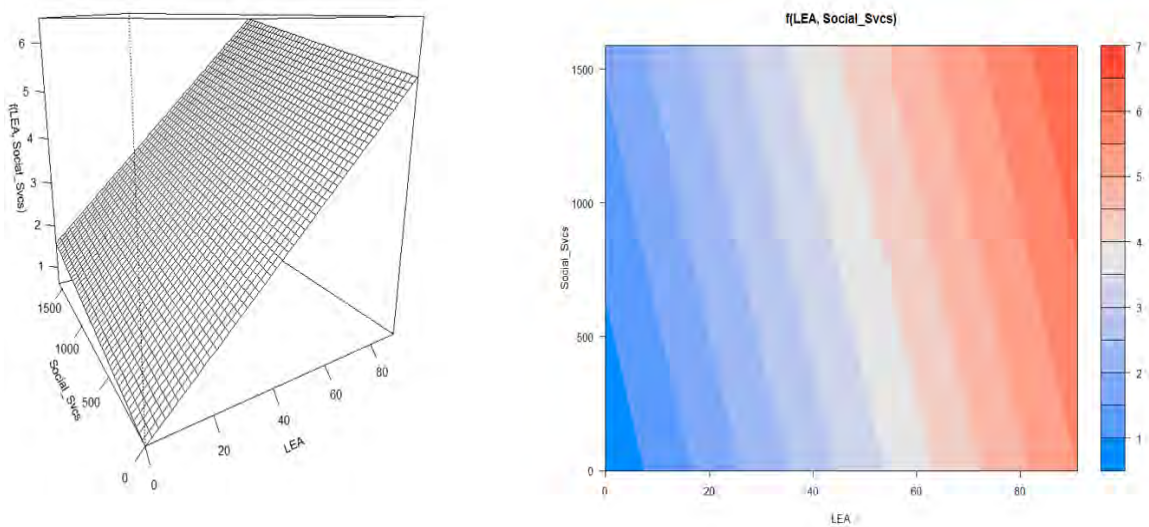
Figure 6.   The Frequencies of the Effects of LEAs and Social Services

4.   Social Services

I analyzed how three different social services variables influenced occurrence of violence. These variables include health centers, schools, and local government headquarters. The health centers variable, as shown in Table 2, shows positive and strongly significant estimates ($p<0.01$) across all the three grid resolutions. In other words, establishing health centers in a given location potentially increases the prevalence of violent events. Violent events are most prevalent in closest proximity to health centers, and increasing the number of health centers has the effect of increasing the occurrence of violent activities. This could be because people converge at health centers for treatment, and therefore violence is likely to emerge as a result of competing interests because there is evidence that violence is closely associated with densely populated areas.[56]

The results for schools variable, as shown in Table 2, shows negative and significant estimates ($p<0.05$ to $p<0.01$) at the three grid resolutions. This finding suggests that establishing schools in a given area reduces localized violent events. Most violence occurs away from schools. Therefore, the conclusion one can draw from this finding is that establishing schools in a given location will most likely reduce the incidences of violent activities in that area, possibly because schools are located away from densely populated areas and schools do not harbor large number of people with competing interests that may result into violence.

The local government variable, as shown in Table 2, shows positive and significant coefficient at the 10 kilometer grid resolution ($p<0.05$). The number of local government headquarters does play a significant role in increasing the prevalence of violent events at the resolution of 10 kilometers. This could be because of local governments being closely associated with the state. It must be noted that local governments could be categorized in the gray area between the state authority components of LEAs and social services, given the role they play in their administrative

---

[56] Fearon and Laitin, "Ethnicity, Insurgency, and Civil War" and Halvard Buhaug and Jan Ketil Rod, "Local Determinants of African Civil Wars, 1970–2001," *Political Geography* 25 (2006): 315–35.

areas. Here, I have put them under social services because in Uganda, local governments are decentralized and serve as a social administration apparatus rather than state instrument like police forces that are controlled by the central government.[57] Note also that at the 30 kilometer and 50 kilometer grid resolutions, the coefficients are negative though non-significant; suggesting that local government headquarters could possibly contribute to reducing violence beyond the 10 kilometer resolution.

The combined social services variables of health centers, schools, and local governments estimated against the dependent variable (violent events) shows positive and non-significant estimates across all the three grid resolutions (see Table 3 and Table 4). This is shown graphically in Figure 5 and Figure 6, implying that the combined effects of the social services elements have an increasing effect on the prevalence of violent events although there is insufficient evidence to that effect.

5.   Economic Activities

The results for the distance to roads data, as shown in Tables 2, 3, and 4, show consistent negative and significant ($p < 0.01$) estimates across the three grid resolutions. This is illustrated graphically in Figures 7 and 8. The implication of this finding is that roads are closely associated with the prevalence of violent activities; that is to say, more violent events occur at the close proximity of roads—as distance from the road increases, the frequency of violence decreases. My interpretation of this finding is based on the fact that counterinsurgent forces and law enforcement agencies find it easier to maneuver on roads from one location to another to fight violence perpetrated by the armed violent groups. An area that is networked with road systems has relatively higher prevalence of violent interactions between government security forces and armed violent groups. This

---

[57] See the entire document in Edward Mugabi, "Uganda's Decentralisation Policy, Legal Framework, Local Government Structure and Service Delivery," in *First Conference of Regional Assemblies of Africa and Europe* (Regional Assembly of Tuscany, Florence, Italy: United Nations Department of Economic and Social Affairs [UNDESA], 2004). Accessed on May 12, 2015, http://unpan1.un.org/intradoc/groups/public/documents/UN/UNPAN029080.pdf.

finding is supported by other studies that also find armed groups use roads to conduct operations and violent activities.[58]
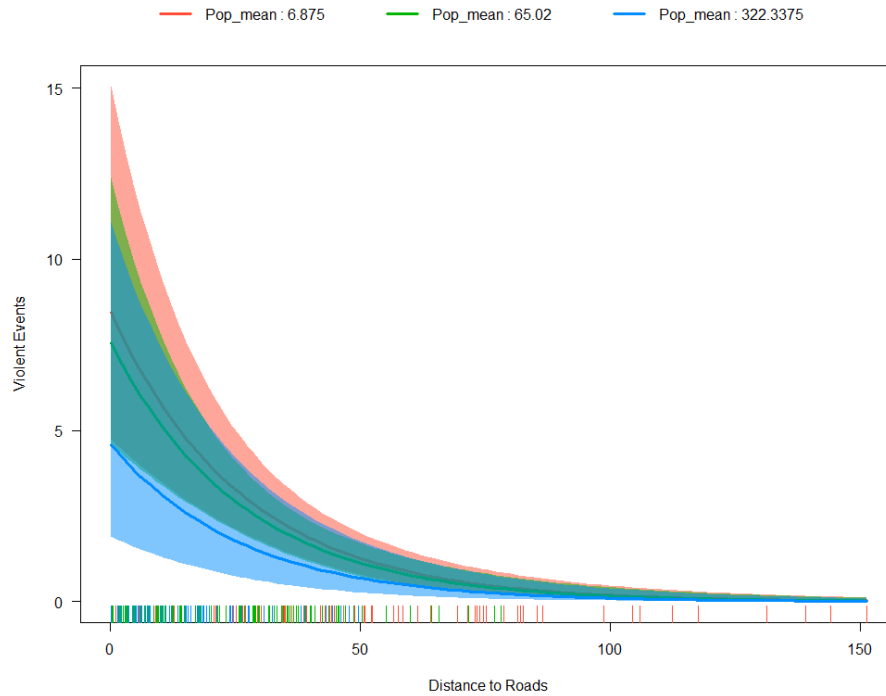
Figure 7.   The Effects of Roads and Population on Violent Events.
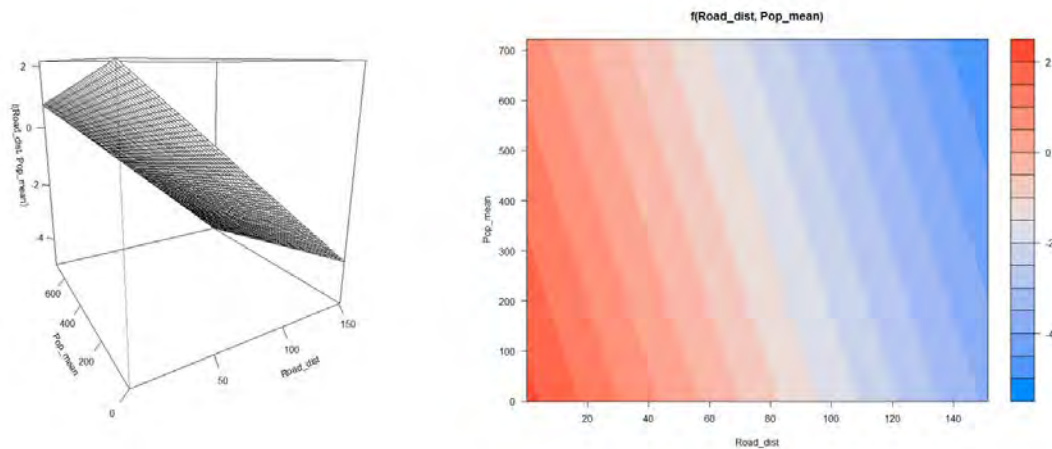
Figure 8.   The Frequency of the Effects of Roads and Population.

[58] See the full discussion in Rabasa et al., *Ungoverned Territories: Understanding and Reducing Terrorism Risks*.

6.   Alternative Interpretations

There are other factors that I considered, which I thought could have some potential influence on the prevalence of violence in a given area. The factors include total population count per unit square kilometer and distance to the state capital of Uganda, Kampala.

The population variable, as shown in Tables 2, 3, and 4, shows varying direction of coefficients: at the 10-kilometer grid resolution, it shows positive and non-significant ($p>0.1$) effects, while at 50-kilometer grid resolution, the effect is negative and significant ($p<0.01$) (Tables 3 and 4, and also illustrated in Figures 7 and 8). At the 30 kilometer grid resolution, the results are negative and insignificant. These results suggest that population increase is directly associated with increase in violent events at the resolution of 10 kilometers from the epicenter of the population mean and that violence decreases as the population increases at 50-kilometer grid resolution. The association of larger population with violence is consistent with other studies, such as the one conducted by Fearon and Laitin.[59]

In considering the regression models for the variable of the distance from the capital of Uganda—Kampala to the location of violent events, the finding shows consistent positive and strongly significant ($p<0.01$) estimates across all the regression models. In other words, as the distance from Kampala increases, the intensity of violent activities increases as well. In the case of Uganda, this finding is contrary to the findings of Buhaug et al., which suggests that insurgents fighting to capture state power fight within the vicinity of the state capital.[60] It must be noted that most of the violent events in the GED data are attributed to the LRA in northern Uganda and the ADF in western Uganda.[61] Both insurgent groups claim to be fighting to capture state power but their

---

[59] For full discussion, see Fearon and Laitin, "Ethnicity, Insurgency, and Civil War."

[60] See full discussions in Halvard Buhaug, Scott Gates, and Päivi Lujala, "Geography, Rebel Capability, and the Duration of Civil Conflict," *Journal of Conflict Resolution* 53, no. 4 (August 1, 2009): 544–69, doi:10.1177/0022002709336457.

[61] See full description in Day, "The Fates of Rebels: Insurgencies in Uganda."

activities are concentrated at the periphery of Uganda and far from Kampala the base of the state; this finding could therefore be pointing to that fact.

In conclusion, the negative binomial regression method most effectively tested the effects of the social, economic, and the control component factors on the dependent variable (violent events). In summary, health centers and local governments are associated with increases in violence, while schools are associated with decrease in the prevalence of violence. More violent events are associated with close proximity to roads. Increase in population mean is associated with decrease in violent events. And distance to the state capital (Kampala) increases with increase in violent events.

In Table 3, it is clear that the combined LEAs show more confidence levels than the social services. Both results show positive coefficients but only the LEAs show significance at conventional confidence level at the 30-kilometer grid resolution. Furthermore, examining the substantive significance in the perspective graph in Figure 6, it is clear that the LEAs show more impact on the dependent variable than the social services—see the y-axis values(frequency). Therefore, the LEAs are the most effective in influencing the dependent variable. The positive effects may be suggesting reverse causation; that is LEAs are built in violence prone areas. It could also mean the LEAs are associated with increased violence. To address this uncertainty we now turn to the MWA method of analysis.

7.   Drilldown Analysis Results

To test for H2b, there is need to drill down into the LEAs. Using the matched wake analysis (MWA) model, I analyzed each of the LEAs variables in the order of police forces, border post forces, courts, and prisons. Figure 8 is the map of Uganda showing the plot of the violent events data (dependent variable), police data (treatment variable) and randomly generated control variables.

Uganda showing Violent Events, Controls, and Police Variables
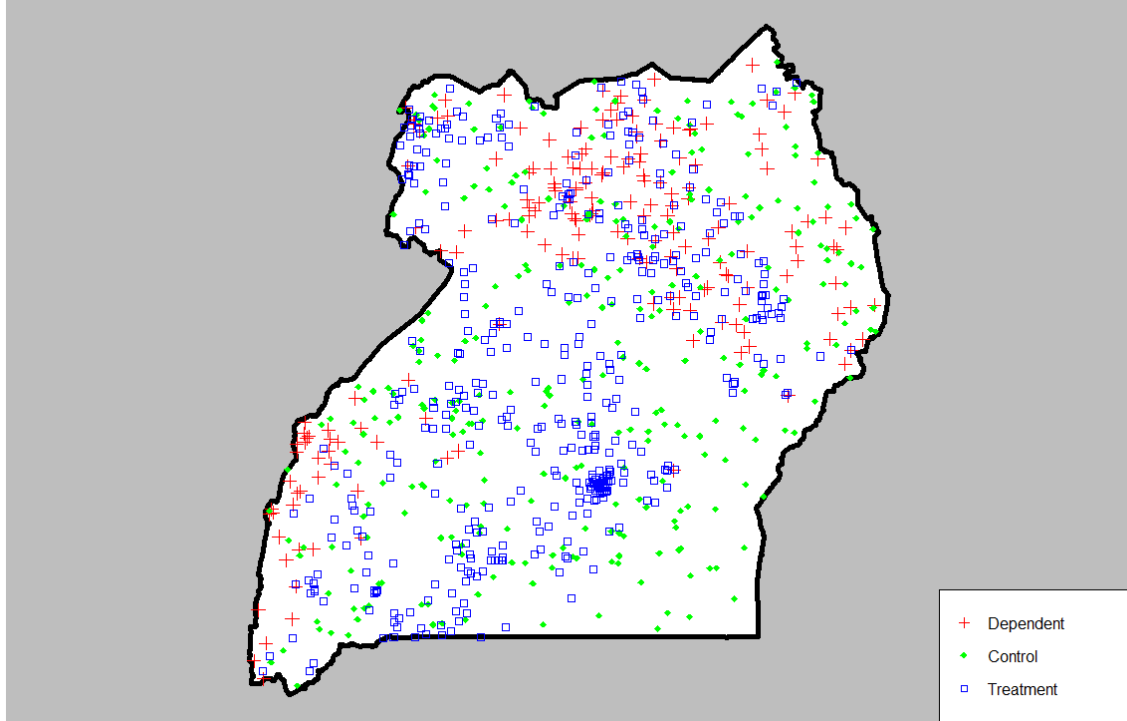
Figure 9.   Map of Uganda Showing Plot of the Variables.

The results of the analysis of the LEAs are shown in Table 5 and Table 6. The values on the left each show the size of the effects of the treatment variables (police forces, border post forces, courts, and prisons) and the corresponding p-values on the dependent variable (violent events) at given time (in days) and space (in kilometers). The empirical results are also presented in a contour plot of the estimates (right of each table) that are superimposed by spatiotemporal windows (grids) showing the significance levels for different time and space window sizes; non-shaded 'boxes' at $p<0.05$, dotted lines indicating $0.05<p<0.1$, and the full lines indicate $p>0.1$. I considered spatiotemporal windows of up to 10 years within distance of up to 150 kilometers.

The results for the police forces (Table 5) show exclusively negative and significant estimates against the violent events; within the first two years of introducing the treatment variable, the effects are significant right from the location of the facility to the limit of the analysis distance selected (150 kilometers), and it could be beyond. The

level of significance of the effects of the police forces on the violent events generally increased with time and space. The border posts variable also shows almost exclusively negative and significant effects on the violent events variable at the 150 kilometer spatial distance within the first year of establishment. As time increased, the spatial distance where significant effects are registered reduced to 30 kilometers after six years of introducing the treatment variable (border post).

The results for the courts (see Table 6) indicate exclusively negative and significant effects against the violent events. The effects are registered at spatial distance of 70—90 kilometers within the first year of introducing the court facility. The estimates become significant at 20 kilometers after the second year of establishing the court facility. The prisons facilities also show exclusive negative and significant effects at 50 kilometers in the first year of establishment. After the second year of establishment, the effects are significant from 20 kilometers of spatial distances.

Therefore, to test for H2b, we compare the spatiotemporal windows of significance of all the four variables. The police forces show negative and significant effects within the first year at 20 kilometers; the border posts forces show negative and significant effects at 150 kilometers in the first year of establishment; the courts show negative and significant effects at 70 kilometers within the first year; and the prisons show negative and significant effects at 50 kilometers within the first year of introducing the facility. This finding arguably supports H2b, that the police forces are the most effective elements within the law enforcement component to reduce violent events and, consequently, ungoverned spaces. This is based on the shorter (localized) distance of effect the police force has within the same time period.

Table 5.　MWA Output for Police and Border Posts forces.

	Time[days]	Space[km]	EffectSize	p.value
1	365	20	-0.093	0.030
2	365	30	-0.121	0.039
3	365	60	-0.156	0.005
4	365	70	-0.339	0.001
5	365	80	-0.543	0.000
6	365	90	-0.612	0.000
7	365	100	-0.778	0.001
8	365	110	-0.849	0.002
9	365	120	-1.075	0.002
10	365	130	-1.434	0.001
11	365	140	-1.821	0.001
12	365	150	-1.964	0.008
13	730	10	-0.067	0.015
14	730	20	-0.233	0.000
15	730	30	-0.276	0.000
16	730	40	-0.210	0.012
17	730	50	-0.454	0.001
18	730	60	-0.910	0.026
19	730	70	-1.366	0.000
20	730	80	-1.765	0.000

Police Forces Results

$P < 0.05$ 　 $0.05 < p < 0.1$ 　 $p > 0.1$

	Time[days]	Space[km]	EffectSize	p.value
1	365	150	-1.100	0.019
2	1095	110	-2.000	0.000
3	1460	80	-8.000	0.000
4	1460	90	-8.000	0.000
5	1460	110	-7.396	0.033
6	1825	80	-8.000	0.000
7	1825	110	-7.679	0.035
8	2190	120	-15.833	0.009
9	2190	150	-31.600	0.005
10	2555	30	-3.000	0.000
11	2555	70	-7.333	0.032
12	2555	80	-7.381	0.007
13	2555	100	-7.333	0.032
14	2555	110	-10.187	0.039
15	2555	120	-14.333	0.010
16	2555	140	-26.231	0.006
17	2555	150	-30.217	0.005
18	2920	30	-3.000	0.000
19	2920	80	-7.333	0.032
20	2920	90	-6.905	0.048

Border Post Forces Results

$P < 0.05$ 　 $0.05 < p < 0.1$ 　 $p > 0.1$

Table 6.   MWA Output for Courts and Prisons.

	Time[days]	Space[km]	EffectSize	p.value
1	365	70	-0.233	0.009
2	365	80	-0.300	0.001
3	365	90	-0.279	0.007
4	365	120	-0.600	0.025
5	730	60	-0.588	0.010
6	730	70	-1.054	0.007
7	730	90	-2.089	0.014
8	730	100	-1.988	0.030
9	730	110	-2.963	0.038
10	730	120	-3.320	0.029
11	730	130	-3.100	0.042
12	730	140	-3.632	0.024
13	730	150	-4.548	0.014
14	1095	20	-0.536	0.020
15	1095	60	-1.403	0.009
16	1095	70	-2.561	0.013
17	1095	90	-4.470	0.001
18	1095	110	-4.490	0.021
19	1460	20	-0.763	0.004
20	1460	30	-0.762	0.038

Courts Results

$P < 0.05$ $0.05 < p < 0.1$ $p > 0.1$

	Time[days]	Space[km]	EffectSize	p.value
1	365	50	-0.135	0.020
2	365	70	-0.182	0.017
3	730	40	-0.334	0.032
4	730	50	-0.473	0.005
5	730	60	-0.599	0.004
6	730	70	-0.898	0.015
7	730	90	-0.863	0.008
8	1095	20	-0.500	0.012
9	1095	30	-0.574	0.015
10	1095	40	-1.136	0.020
11	1095	50	-1.769	0.021
12	1095	60	-1.246	0.009
13	1095	70	-2.157	0.011
14	1095	80	-2.654	0.031
15	1095	130	-6.775	0.019
16	1095	140	-6.834	0.022
17	1095	150	-7.083	0.022
18	1460	20	-0.812	0.004
19	1460	30	-0.917	0.011
20	1460	40	-1.282	0.027

Prisons Results

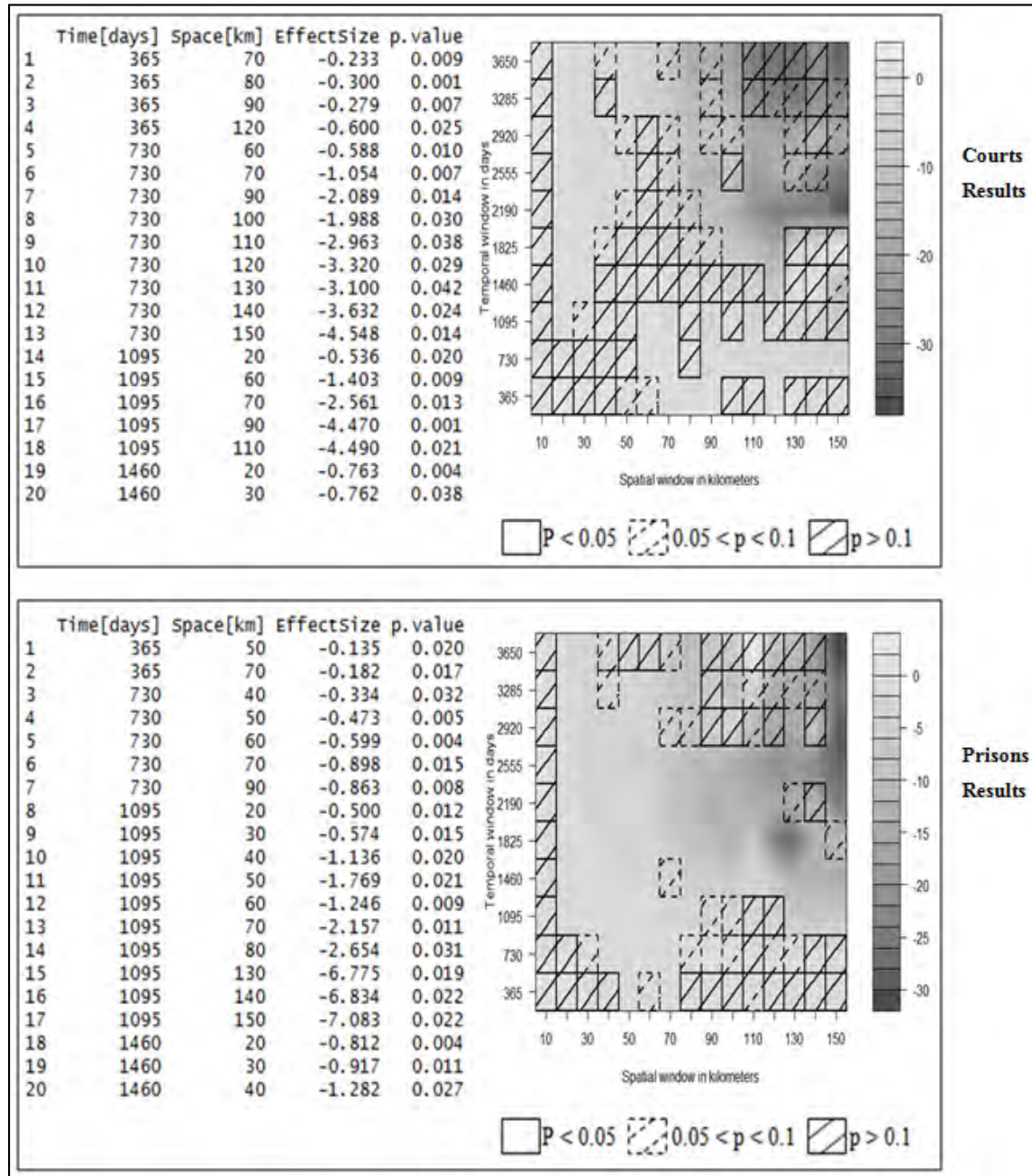$P < 0.05$ $0.05 < p < 0.1$ $p > 0.1$

Table 7 shows the combined effects of police and border control forces on one hand and the courts and prisons on the other. That is to say law and order department vis-à-vis justice department. The results clearly show how effective the combined police forces are over and above the combined effects of the courts and the prisons. In other

words, joint efforts of police and border control forces have exclusively negative and significant effects on the violent events from the first year at spatial distance of 10 kilometers onwards. While the joined effects of the courts and prisons are a mixture of negatives and positives, significant from the second year at spatial distance of 100 kilometers.

Table 7.   MWA Output for Combined (Paired) LEAs.
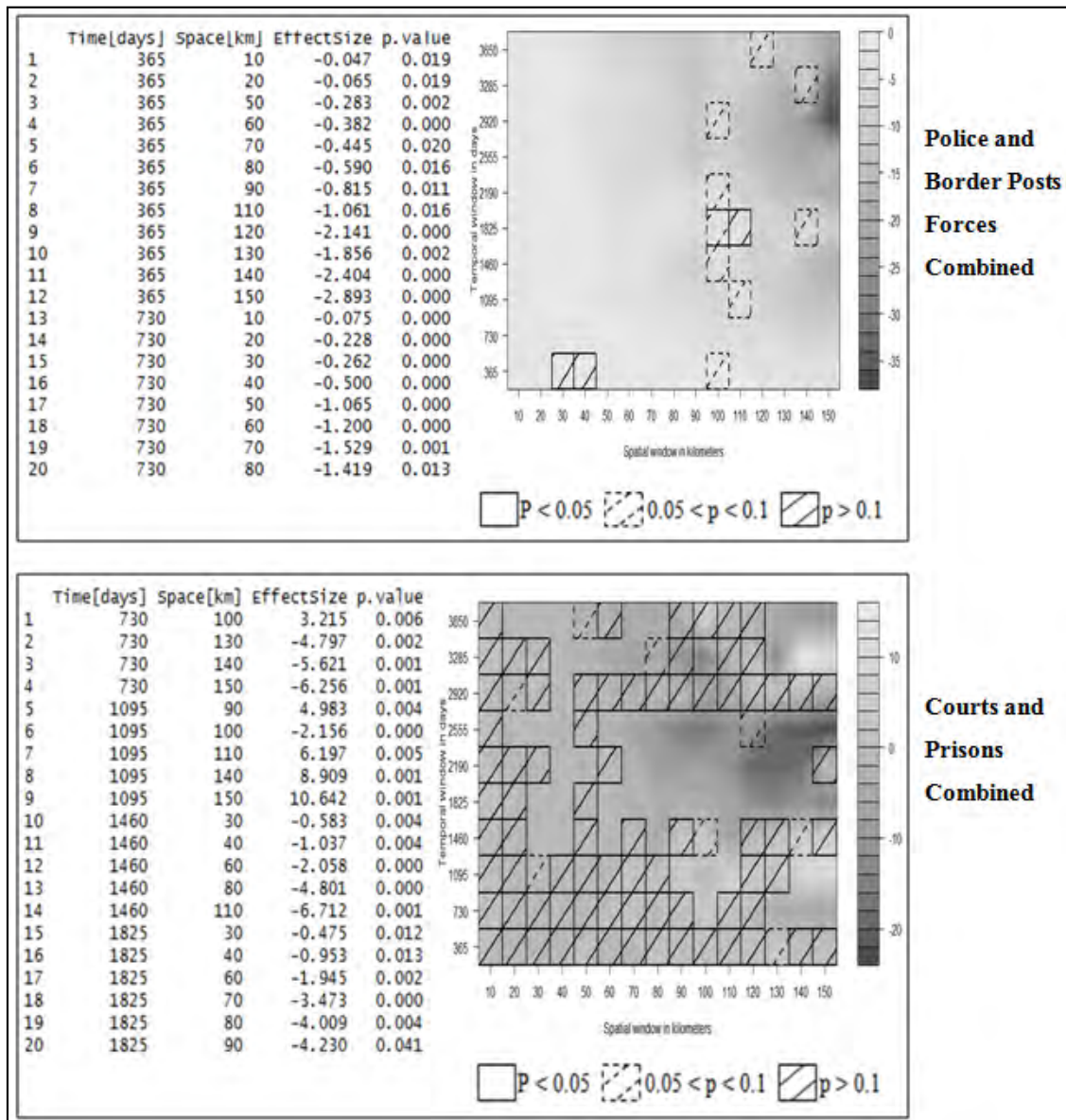
B.   DISCUSSION

The findings in this work provide supporting evidence to the hypotheses of this study. State authority, in the form of LEAs and social services, contributes in varying degrees to the pacification of ungoverned spaces and reduction of violent events—H1. The most effective of the state authority component factors in this endeavor is LEAs—H2a. Within LEAs, and based on the results of the MWA, the effective elements are ranked, starting with the most effective, in the order of police forces, prisons, courts, and border posts forces—H2b. However, a combination of police and border control forces seems to be even more effective in reducing violence and pacifying ungoverned spaces.

Of the social services and welfare elements, the ranking, beginning with the most effective, is in the order of schools and local government headquarters. The health centers, on the contrary, are more associated with the prevalence of violent events. However, when considered jointly with the other social services, the net result is inconclusive, but appears to be increased effect on the prevalence of violent events.

The result for the economic factor shows that it does not contribute to reduction of violent events; instead, it is associated with high prevalence of violent events. This finding suggests that the elements of the economic factor increase the prevalence of violence. I considered only roads as the economic factor element that falls within the responsibility of the state to build. Further research is recommended in this field.

This study also provides supporting evidence that increased population mean is associated with reduced level of violence. There is also strong evidence that shows more violent events in Uganda occurred farther from the state capital, Kampala. Most of the violent events are registered at the periphery of the northern, western, and eastern borders of the country.

THIS PAGE INTENTIONALLY LEFT BLANK

VI.   CONCLUSION AND RECOMMENDATION

Ungoverned spaces have been deemed responsible for harboring most of the insurgent and terrorist groups that pose security threats to global peace. The ungoverned or under-governed territories are most often found in developing nations; probably because they do not have the resources to enable them take control of every piece of their de jure sovereign space. Insurgents and terrorists, therefore, take advantage of the territories with no or little state presence to establish and develop capabilities to wage insurrections against the state, in particular, and or the world in general. Politicians and scholars, having noticed this global threat, developed several theories related to ungoverned territories. Most of the solutions they prescribed centered on giving social and security aid to developing countries to take control of ungoverned or under-governed territories.[62]

This study was designed to investigate how a developing nation can effectively rely on its meager resources to reduce ungoverned territories and solve the problem of insecurity emanating from such territories. The findings show that the state can capitalize on building its law enforcement institutions and social services to achieve the needed control over its sovereign territory. The economic activities, on the other hand, have been found to be associated with increased prevalence of conflicts; so, they must be established after or concurrently with the law enforcement and social services institutions.

A.   SUMMARY OF THE FINDINGS AND THE IMPLICATIONS

According to the findings of this study, there is evidence that law enforcement agencies such as police, prisons, courts, and border protection services play important roles in reducing violent activities. This study, additionally, suggests that combining the effects of police and border control forces appears to be even more effective in reducing

---

[62] For full discussions, see Ghani and Lockhart, *Fixing Failed States*; Rabasa et al., *Ungoverned Territories*; and Anne L. Clunan and Harold A. Trinkunas, eds., *Ungoverned Spaces: Alternatives to State Authority in an Era of Softened Sovereignty*, First Edition (Stanford, California: Stanford Security Studies, 2010).

the prevalence of violent events. Moreover, the justice sector, which is a combination of the Courts and prisons, also plays some important role in reducing violence although not as effective as the law and order sector. In sum, to reduce ungoverned spaces, the developing state can capitalize on building its law and order department and the justice department in the ungoverned space to establish its authority and reduce violence emanating from those ungoverned spaces.

Among the social services considered in this study, schools and local government headquarters contribute to reducing the prevalence of violence. This could be because schools enlighten folks and re-orient their thinking towards development rather than towards violence. Local governments normally work closely with law enforcement agencies; it could therefore be the result of 'ripple effects' that the local governments also reduce violence. The health centers, on the other hand, are associated with increased level of violent activities. The meaning of this finding could be that the health centers are the locations where most people converge for treatment, and where there are more people, more violence is recorded. However, the findings here show that the combined effect of the social services reduces violent events. The developing state can therefore, in addition to the LEAs, use the social services to further take charge in ungoverned spaces and also reduce violent events.

The findings with regard to economic infrastructure—roads, in this case—show that more violent events are associated with close proximity to roads. Everyone uses the roads to commute from one location to another; therefore, there is high probability that most violent events will be recorded at or in close proximity to roads. The implication of this finding is that as the state embarks on providing economic infrastructure to the population, it must also consider locating law and order agencies to reduce the prevalence of violence that may result from construction of roads network. This evidence is based on roads only, it is not sufficient to measure all economic activities that are provided by the state to facilitate the general populace.

This study also found support for previous works that argue that increased population is associated with increased violent events.[63] There is also evidence that increased violent events occur farther from the location of the state capital—Kampala. This is contrary to findings by other studies that show violent events intended to capture of state power are normally conducted at close proximity of the state capital.[64]

B.   LIMITATIONS AND FURTHER RESEARCH OPPORTUNITIES

One serious limitation of conducting research with regard to some individual African states is the lack of data. It is very difficult to find detailed data on most human activities in some African states. My original intention was to conduct this study using data from all the five East African Community (EAC) countries; but it proved very difficult to find data for the variables from all the five countries. I had to narrow down the research sample size to one country—Uganda. In the event that data becomes available from the region, this research may be replicated with a bigger sample. The east and central Africa region is one of the most violent in Africa. It is also a region where successful resolutions of armed civil conflicts have been conducted. Knowledge derived from studying this region may therefore help in solving the problem of insurgency in Africa and elsewhere.

One may also wish to dig deeper into the findings of this research by conducting a study to establish why law enforcement agencies (LEAs) are more effective than social services and the economic infrastructure in reducing the prevalence of violence in a given territory. Could it be because the LEAs use both hard power and soft power concurrently and the social services and the economic factors use only soft power? Or could it be entirely due to hard power that the LEAs are more effective in reducing the prevalence of violence?

Due to classification issues as well as the lack of data, I could not use data on deployment and activities of the Ugandan military with regard to its effectiveness in

---

[63] For full explanation, see Fearon and Laitin, "Ethnicity, Insurgency, and Civil War."

[64] Halvard Buhaug and Jan Ketil Rod, "Local Determinants of African Civil Wars, 1970 - 2001," *Political Geography* 25 (2006): 315–35.

reducing ungoverned spaces and violence in Uganda. Further classified research could be conducted to find out whether the military actually plays an important role in reducing ungoverned spaces. One may argue that the military fights the insurgents, but the authority of the state is seen and vested in the LEAs; so the military may not be that important in reducing ungoverned spaces. An objective investigation is needed to consider what is actually important in reducing the violence in these hard to observe spaces.

I also did not consider the specifics of the types of violence that the LEAs reduce; there are several types of violent activities including but not limited to battles, violence against civilians by fellow civilians, riots, insurgents, and counterinsurgents. I bundled them all together as violent activities/events. One may want to research further to ascertain exactly which type of violence is reduced by the LEAs; and, which are not reduced by the LEAs.

Since Uganda is a small country—about 400 kilometers east to west and 600 kilometers south to north; I therefore used smaller grid resolutions—10-kilometer, 30-kilometer, and 50-kilometer—for the negative binomial regression models. With a bigger sample size, one may try to use grid resolutions of 100 kilometers and larger to test the consistency of these findings. However, note that the bigger the resolution, the smaller the total data points interpolated for analysis and this affects the reliability of the model's results.

C.   POLICY RECOMMENDATIONS

Africa, from my personal experience, has a lot of activities that are not captured in the form of data ready for further analysis. If we really want to know more about Africa and the individual states within it, powerful organizations should consider funding data collection projects. There is no need to worry about the analysis; graduate schools in Africa and around the world will do the work. The priority needs to be the collection of the data, because until the data is collected we shall never know about Africa as much as we would wish and we will be reliant on mostly subjective and often inaccurate analyses.

African states, especially those riddled with ungoverned spaces, should consider developing and deploying their LEAs in those areas that are ungoverned or under-governed. The police and border protection forces will be instrumental in enforcing the law and order within the state and at the borders thus denying violent groups—especially insurgents and terrorists—access to the state's sovereign territory. The justice component—courts and prisons—will work with the police forces to accomplish the establishment of the state's authority. The overall effect of having robust LEAs is lack of ungoverned territories and therefore reduced incidences of violence in the country.

The international community, especially the U.S., has taken a great deal of interest in studying the phenomenon of ungoverned spaces. Some scholars suggested giving aid to the developing states without specifying where exactly the aid should be deployed.[65] My finding suggests that the aid should be focused on the state's LEAs and some social services like schools and local administrations. These are the most effective agencies in reducing prevalence of ungoverned spaces and violence in a sovereign state. I also think with or without aid, a sovereign state should be able to build its own law enforcement agencies and reduce ungoverned territories from within its borders; it is a question of time and setting of priorities.

D.   CONCLUSION

As developing nations grapple with the phenomenon of ungoverned, under-governed, contested, and abdicated territories, it was my interest to find out whether this problem could actually be solved internally. Such territories have been found to harbor insurgent and terrorist groups that are responsible for most insecurity problems affecting individual states and the international community at large. It is therefore not only in the interest of the affected states but also the international community to reduce ungoverned territories by establishing state authorities in such territories. This, in effect, will reduce the incidences of insecurity or violence emanating from those ungoverned territories.

---

[65] Rabasa et al., *Ungoverned Territories, iii—iv*; Haims et al., *Breaking the Failed-State Cycle, xvii*; Pham, "State Collapse, Insurgency, and Counterinsurgency: Lessons from Somalia"; Ghani and Lockhart, *Fixing Failed States, i–vii*.

This study has found that the most effective way of establishing the state's authority in ungoverned territory is by deploying law enforcement agencies including the police, border protection, courts, and prisons. Besides, the state may also consider constructing local government headquarters and schools as a way of using soft power to change the thinking of the local population so as to become law abiding citizens. Other elements of social services such as health centers and that of economic infrastructure such as roads tend to be associated with increased level of violent activities. This could be mitigated by first establishing law enforcement agencies before introducing these social services and economic infrastructure. This will ensure that those individuals seeking social services or engaging in economic activities are doing so lawfully and orderly.

Ungoverned territories most often tend to be located far from the base of the state—it's capital. This could be the main problem troubling east and central Africa as a region. Insurgent groups from neighboring states cross the border and establish sanctuaries with or without the support of the hosting state. It is therefore important that each state works toward establishing its authority in all of its sovereign territory and prevent insurgent or terrorist groups from occupying any piece of it.

Finally, close international collaboration is strongly recommended; especially through regional organizations to foster closer ties between states so that they are able to help each other in reducing armed conflicts and ungoverned spaces in their respective territories. A simple principle, 'scratch my back and I scratch yours', may help Uganda and its neighbors to reduce the high prevalence of violence in the east and central Africa region.

LIST OF REFERENCES

Baylouny, Anne Marie. "Authority Outside the State: Non-State Actors and New Institutions in the Middle East." In *Ungoverned Spaces: Alternatives to State Authority in an Era of Softened Sovereignty*, 136–52. Chapter 7. California: Stanford University Press, 2010.

Berman, Eli, Jacob N. Shapiro, and Joseph H. Felter. "Can Hearts and Minds Be Bought? The Economics of Counterinsurgency in Iraq." *Journal of Political Economy* 119, no. 4 (August 2011): 766–819.

Berman, Nicolas, and Mathieu Couttenier. "External Shocks, Internal Shots: The Geography of Civil Conflicts." SSRN Scholarly Paper. Rochester, NY: Social Science Research Network, March 1, 2014. http://papers.ssrn.com/abstract=2444917.

Best, Shaun. *Introduction to Politics and Society*. First Edition. London ; Thousand Oaks, California: SAGE Publications Ltd, 2002.

Buhaug, Halvard, Scott Gates, and Päivi Lujala. "Geography, Rebel Capability, and the Duration of Civil Conflict." *Journal of Conflict Resolution* 53, no. 4 (August 1, 2009): 544–69. doi:10.1177/0022002709336457.

Buhaug, Halvard, and Jan Ketil Rod. "Local Determinants of African Civil Wars, 1970 - 2001." *Political Geography* 25 (2006): 315–35.

Clionadh, Raleigh. "Realtime Data (2014) | ACLED." World Bank Sponsored Data Project. *Armed Conflict Locations & Event Data Project*, November 29, 2014. http://www.acleddata.com/data/realtime-data-2014/.

Clunan, Anne L., and Harold A. Trinkunas. "Conceptualizing Ungoverned Spaces." In *Ungoverned Spaces: Alternatives to State Authority in an Era of Softened Sovereignty*, 17–33. Chapter 1. California: Stanford University Press, 2010.

———. , eds. *Ungoverned Spaces: Alternatives to State Authority in an Era of Softened Sovereignty*. First Edition. Stanford, California: Stanford Security Studies, 2010.

Davies, James. *The Importance of Suffering: The Value and Meaning of Emotional Discontent*. 1 edition. London ; New York: Routledge, 2011.

Davies, James, and Dimitrina Spencer, eds. *Emotions in the Field: The Psychology and Anthropology of Fieldwork Experience*. Stanford, California: Stanford University Press, 2010.

Day, Christopher. "The Fates of Rebels: Insurgencies in Uganda." *City University of New York* 43, no. 4 (July 2011): 439–58.

Eck, Kristine. "In Data We Trust? A Comparison of UCDP GED and ACLED Conflict Events Datasets." *Cooperation and Conflict* 47, no. 1 (2012): 124–41.

Fearon, James D., and David D. Laitin. "Ethnicity, Insurgency, and Civil War." *American Political Science Review* 97, no. 01 (February 2003): 75–90. doi:10.1017/S0003055403000534.

Fund for Peace Project. "The Fund for Peace." *Fund for Peace*, 2014. http://ffp.statesindex.org/.

Ghani, Ashraf, and Clare Lockhart. *Fixing Failed States: A Framework for Rebuilding a Fractured World*. 1st edition. Oxford; New York: Oxford University Press, 2009.

Giddens, Anthony. *The Consequences of Modernity*. First Edition. Stanford, Calif.: Stanford University Press, 1991.

———. *The Constitution of Society: Outline of the Theory of Structuration*. New Edition. Berkeley: University of California Press, 1986.

Giddens, Anthony, Mitchell Duneier, Richard P. Appelbaum, and Deborah Carr. *Introduction to Sociology*. Eighth Edition. New York: W. W. Norton & Company, 2011.

Groh, Ty L. "A Fortress without Walls: Alternative Governance Structures on the Afghan-Pakistan Frontier." In *Ungoverned Spaces: Alternatives to State Authority in an Era of Softened Sovereignty*, 95–112. Chapter 5. California: Stanford University Press, 2010.

Gurr, Ted Robert. *Why Men Rebel.* Princeton, New Jersey: Princeton University Press, 1970.

Haims, Marla C., David C. Gompert, Gregory F. Treverton, and Brooke K. Stearns. *Breaking the Failed-State Cycle*. Santa Monica, CA: RAND Corporation, 2008.

Hendrix, Cullen S. "Measuring State Capacity: Theoretical and Empirical Implications for the Study of Civil Conflict." *Journal of Peace Research* 47, no. 3 (May 1, 2010): 273–85.

Jakobsen, Tor G. "The J-Curve – James C. Davies' Theory of Revolutions." *POPULAR SOCIAL SCIENCE*, April 17, 2013. http://www.popularsocialscience.com/2013/04/17/james-c-davies-j-curve-theory-of-revolutions/.

JLOS, Government of Uganda. "GIS Map Locations of JLOS Institutions." *Justice Law and Order Sector*, December 4, 2013. http://www.jlos.go.ug/old/index.php/2012-09-25-11-09-41/2013-02-11-08-51-36/gis.

Jones, Ben. "Katine: Who Are the Karamojong." *The Guardian*, February 16, 2009. http://www.theguardian.com/katine/2009/feb/17/karamojong-background.

Kalyvas, Stathis N. *The Logic of Violence in Civil War*. 1 edition. Cambridge; New York: Cambridge University Press, 2006.

McCormick, Gordon H. "Seminar in Guerrilla Warfare." Lectures presented at the Naval Postgraduate School, Monterey, CA, Winter 2014.

———. "The Complete Win." In *Gangs and Guerrillas*, edited by Michael Freeman and Hy Rothstein, 3–7. Chapter 1. Monterey, CA: NPS, 2011.

McCormick, Gordon H., and Frank Giordano. "Things Come Together: Symbolic Violence and Guerrilla Mobilization." *Third World Quarterly* 28, no. 2 (2007): 295–320. doi:10.1080/01436590601153705.

Menkhaus, Ken, and Jacob N. Shapiro. "Non-State Actors and Failed States: Lessons from Al-Qaida's Experience in in the Horn of Africa." In *Ungoverned Spaces: Alternatives to State Authority in an Era of Softened Sovereignty*, 77–94. Chapter 4. California: Stanford University Press, 2010.

Mkutu, Kennedy. "Disarmament in Karamoja, Northern Uganda: Is This a Solution for Localized Violent Inter and Intra-Communal Conflict." *The Round Table* 97 (2008): 99–120. doi:10.1080/00358530701844718.

Olson, Mancur. *The Logic of Collective Action: Public Goods and the Theory of Groups*. Revised Edition. Cambridge and Mass: Harvard University Press, 1971.

Perkins, Brian. "Factionalism of the Tehrik-I-Taliban Pakistan: Can the Pakistani Government Correct Past Deficiencies | Small Wars Journal." *Small Wars Journal*, July 19, 2014. http://smallwarsjournal.com/jrnl/art/factionalism-of-the-tehrik-i-taliban-pakistan-can-the-pakistani-government-correct-past-def.

Pham, Peter J. "State Collapse, Insurgency, and Counterinsurgency: Lessons from Somalia." *The U.S. Army War College Strategic Studies Institute*, November 14, 2013. http://www.strategicstudiesinstitute.army.mil/pubs/display.cfm?pubID=1176.

Rabasa, Angel, Steven Boraz, Peter Chalk, Kim Cragin, and Theodore W. Karasik. *Ungoverned Territories: Understanding and Reducing Terrorism Risks*. Advance Review Copy Edition. Santa Monica, CA: RAND Corporation, 2007.

Raleigh, Clionadh, Andrew Linke, and Caitriona Dowd. "Armed Conflict Location and Event Data (ACLED)." Data Bank. *Armed Conflict Location and Event Data Project*, 2015. http://www.acleddata.com/.

Reno, William. "Persistent Insurgencies and Warlords: Who Is Nasty, Who Is Nice, and Why?" In *Ungoverned Spaces: Alternatives to State Authority in an Era of Softened Sovereignty*, 57–76. Chapter 3. California: Stanford University Press, 2010.

Salehyan, Idean. *Rebels without Borders: Transnational Insurgencies in World Politics*. Ithaca, N.Y.: Cornell University Press, 2009.

———. "Transnational Insurgencies and the Escalation of Regional Conflict: Lessons for Iraq and Afghanistan." *Strategic Studies Institute*, March 4, 2010. http://www.strategicstudiesinstitute.army.mil/pubs/display.cfm?pubID=971.

Schutte, Sebastian, and Karsten Donnay. "Matched Wake Analysis: Finding Causal Relationships in Spatiotemporal Event Data." SSRN Scholarly Paper. Rochester, NY: Social Science Research Network, April 14, 2014. http://papers.ssrn.com/abstract=2425119.

Scott, James C. *The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia*. New Haven: Yale University Press, 2010.

Skocpol, Theda. *States and Social Revolutions: A Comparative Analysis of France, Russia and China*. Cambridge; New York: Cambridge University Press, 1979.

Sundberg, Ralph, Mathilda Lindgren, and Ausra Padskocimaite. "Georeferenced Event Datasets." *UCDP GED Global Instances of Political Violence*, November 15, 2012. http://www.ucdp.uu.se/ged/data.php.

Tilly, Charles. *From Mobilization to Revolution*. Reading, Mass: Addison-Wesley, 1978.

UBOS, Government of Uganda. "Uganda Bureau of Statistics | Uganda's Official Statistics Provider." National Data Bank. *Uganda Bureau of Statistics*, 2015. http://www.ubos.org/.

United Nations. "Current Peacekeeping Operations. United Nations Peacekeeping." *United Nations Peacekeeping Operations*, 2014. http://www.un.org/en/peacekeeping/operations/current.shtml.

UNRA, Government of Uganda. "Uganda National Roads Authority (UNRA). Efficient Roads for National Development." *Uganda National Roads Authority*, 2014. https://www.unra.go.ug/.

UNSC. "SECURITY COUNCIL RESOLUTIONS - 1999." *United Nations Security Council Resolutions - 1999*, 1999. http://www.un.org/Docs/scres/1999/sc99.htm.

Valosin, Shawn. "US-Ugandan Forces Complete Joint Training | African Defense," December 22, 2014. http://www.african-defense.com/?p=936&utm_source=December+23+2014+EN&utm_campaign=12%2F23%2F2014&utm_medium=email.

Warren, Camber T. "Not by the Sword Alone: Soft Power, Mass Media, and the Production of State Sovereignty." *Camber Warren, Department of Defense Analysis, Naval Postgraduate School*, 2011. http://www.camberwarren.net/papers.html.

Williams, Phil. "Here Be Dragons: Dangerous Spaces and International Security." In *Ungoverned Spaces: Alternatives to State Authority in an Era of Softened Sovereignty*, 34–54. Chapter 2. California: Stanford University Press, 2010.

Wilson, Greg. "The Mystic Diamond: Applying the Diamond Model of Counterinsurgency in the Philippines." In *Gangs and Guerrillas*, edited by Michael Freeman and Hy Rothstein, 15–21. 4. Monterey, CA: NPS, 2011.

World Bank. "A Snapshot of Uganda's Health and Education Services." *World BanK News*, November 19, 2013. http://www.worldbank.org/en/news/opinion/2013/11/19/a-snapshot-of-uganda-s-health-and-education-services.

THIS PAGE INTENTIONALLY LEFT BLANK

INITIAL DISTRIBUTION LIST

1.   Defense Technical Information Center
        Ft. Belvoir, Virginia

2.   Dudley Knox Library
        Naval Postgraduate School
        Monterey, California